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CHANGES IN OUR FINANCIAL SYSTEM: GLOBALIZATION OF CAPITAL MARKETS AND SECURITIZATION OF CREDIT

HEARINGS

BEFORE THE

COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS UNITED STATES SENATE

ONE HUNDREDTH CONGRESS

FIRST SESSION

ON

THE DEVELOPMENT OF WORLDWIDE CAPITAL MARKETS BROUGHT ABOUT BY ADVANCES IN COMPUTER AND SATELLITE TECHNOLOGY, INSTANTANEOUS GLOBAL COMMUNICATION, AND WHETHER THIS HAS UNDERMINED THE GLASS-STEAGALL ACT

OCTOBER 13 AND 14, 1987

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CHANGES IN OUR FINANCIAL SYSTEM: GLOBALIZATION OF CAPITAL MARKETS AND SECURITIZATION OF CREDIT

TUESDAY, OCTOBER 13, 1987

U.S. SENATE,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
Washington, DC.

The committee met at 10:05 a.m., in room SD–538 of the Dirksen Senate Office Building, Senator William Proxmire (Chairman of the committee) presiding.

Present: Senators Proxmire, Riegle, Sasser, Sanford, Graham, D'Amato, Hecht, Bond, and Karnes.

OPENING STATEMENT OF CHAIRMAN PROXMIRE

The CHAIRMAN. The committee will come to order.

When the Glass-Steagall Act was passed in 1933, capital markets were overwhelmingly domestic. There was very little worldwide investment. Now we have worldwide investment that has just exploded. U.S. investment in foreign securities increased thirtyfold between 1975 and 1986. It increased from $14.4 billion in 1975 to $438.5 billion in 1986.

What is even more astonishing is the way that investment in U.S. securities by foreigners increased in those years. In 1975 it was $1.9 billion. There was a fiftyfold increase in 11 years to 1986 to $2.56 trillion. There is every indication that this trend will continue to accelerate.

We live now in a global market. Technology has made an enormous difference, and we have been able to make time virtually disappear in the 24-hour markets.

The question before the committee is whether this has undermined Glass-Steagall. U.S. banks have underwritten a wide range of securities overseas without major incident. Fifteen foreign banks underwrite securities in the United States pursuant to grandfathered rights under the International Banking Act.

Repealing the Glass-Steagall Act would increase competition in investment banking. Within the United States, the investment banking industry is highly concentrated. During 1986, the top five managing underwriters of large public debt offerings accounted for 83 percent of the total dollar value underwritten. For large public stock offerings, the figure was 58 percent, and for offering of corporate debt as agent of the issuer, 95 percent.

Senator Garn, the ranking member of this committee, held hearings on the Glass-Steagall Act in February 1986, and did an excel-

lent job in setting the stage. I want to see us act on a bill in the next several months, preferably in this session.

I commend the witnesses on the high quality of their written statements.

Our old friend, John Heimann, did an outstanding job as comptroller of the currency, and is now doing an outstanding job for Merrill Lynch. As one of their very top people, he speaks with great authority.

Robert Mendoza, of Morgan Guaranty—Mr. Mendoza works for a firm that I worked for before it became Morgan Guaranty. I worked for J. P. Morgan and Company back in 1940 in a much humbler position, Mr. Mendoza, than I am sure you are in. That affluent firm paid me the gracious wage of $25 a week. [Laughter.]

And I wasn't worth it. [Laughter.]

[The complete prepared statements of Chairman Proxmire, Senators Dixon, Sasser, Garn, D'Amato, and Karnes follow:]

OPENING STATEMENT OF SENATOR WILLIAM PROXMIRE
HEARING ON GLOBALIZATION OF CAPITAL MARKETS
SENATE BANKING COMMITTEE
OCTOBER 13, 1987

In 1933, when the Glass-Steagall Act was passed, our nation's financial markets were largely self-contained. Our commercial banks and investment banking firms were, with few exceptions, domestically owned and domestically oriented. The Great Depression had interrupted earlier trends toward internationalization of capital markets, and those trends did not resume until after World War II.

Now, however, our banking and securities markets are part of a global network in which transactions crisscross national boundaries at virtually the speed of light. Transactions in foreign securities by U.S. investors increased from $14.4 billion in 1975 to $438.5 billion in 1986. Transactions in U.S. securities by foreign investors increased from $51.9 billion in 1975 to $2.56 trillion in 1986. The Eurobond market has grown to be nearly as large as the U.S. corporate bond market, and a worldwide, round-the-clock securities market is emerging. Foreign banks and their subsidiaries now control one-fifth of our bank deposits and make one-fifth of our commercial loans.

Many commercial and investment banking firms believe that they can remain major players only by having a global presence. And there is every reason to expect the trend toward globalization to continue, if not accelerate.

Globalization has undermined the the Glass-Steagall Act in several ways. The investment banking lobby has warned us that the sky will fall if we give banks new underwriting powers. But U.S. banks have underwritten a wide range of securities overseas for years now, without major incident. In many instances, U.S. investors can purchase those securities (after the initial underwriting) merely by making a telephone call to their brokers. In addition, some 15 foreign banks underwrite securities in the United States pursuant to grandfather rights under the International Banking Act.

Repealing the Glass-Steagall Act would increase competition in investment banking. Within the United States, the investment banking industry is highly concentrated. During 1986, the top five managing underwriters of large public debt offerings accounted for 83 percent of the total dollar value underwritten. For large public stock offerings, the figure was 58 percent, and for offerings of corporate debt as agent of the issuer, 95 percent. We had testimony earlier this year that when the compensation of investment banking professionals is included in operating earnings, investment banking firms enjoy returns on equity in the 40 percent range. If true, is this an indication of how much their protected status costs the American consumer?

It is in this context that we consider the globalization of capital markets.

I want to acknowledge the major contribution made to the Committee's consideration of this subject by my colleague, Jake Garn, who has been concerned with it for years and held hearings on it in February 1986.

STATEMENT OF SENATOR ALAN DIXON

Senator DIXON. I am pleased to be here this morning as the Banking Committee reviews issues raised by the increasing internationalization of financial markets. We have a distinguished panel of witnesses before us this morning, and I look forward to hearing from them.

I want to congratulate the chairman for scheduling this hearing, because financial services markets, like markets for many other goods and services, are increasingly international in character. I have spent a lot of time working on the Export Administration Act, trying to ensure that we stop making policy in that area in a vacuum, without regard to the realities of the international marketplace. Taking those realities into account is also essential in the financial services area. A sound understanding of international markets and trends is essential if we are to craft strong and workable reform legislation.

International capital markets are growing rapidly. We can no longer afford to take our financial leadership for granted. What is more, major capital markets overseas are increasingly taking steps to become more open and more free. The "big bang" in London and the recent enactment of comprehensive banking reform legislation in Canada are simply the most recent dramatic examples of this trend.

I think it is important, therefore, that we all consider the issues that will be discussed today very carefully. The increasing globalization of financial markets provides additional compelling reasons for acting on financial reform issues this year.

STATEMENT OF SENATOR JIM SASSER

Senator SASSER. Mr. Chairman, I am pleased that the committee is continuing the process of hearings that we agreed to undertake in connection with our comprehensive review of the structure of the U.S. banking industry. The development of worldwide capital markets brought about by advances in computer and satellite technology, and instantaneous global communication, underlines the need to keep America's banking industry competitive with that of the rest of the world.

However, I believe that there are countervailing concerns that the committee must address as we develop restructuring legislation in the coming months. I think it is important that we not do anything to increase the potential for conflicts of interest and other risks that could endanger the safety and soundness of our banking system. Moreover, we should not encourage excessive linkages between banks, which are supposed to be impartial providers of credit, and corporations. And we should not lose sight of the needs of the American financial services consumer. And by consumer I mean the man in the street—Main Street, that is.

Most of all Mr. Chairman, I am concerned that in an effort to make changes so that American banks can better compete globally, we should not create enormous monolithic financial organizations that could wield collusive and anticompetitive economic power and have a detrimental impact of the domestic market, particularly on

small local institutions, that I believe have served this country well.

Mr. Chairman, I look forward to today's testimony. Thank you.

STATEMENT OF SENATOR GARN

Senator GARN. I commend the chairman for holding this hearing on the effect of globalization on our capital markets and our financial firms. As he knows, this is a subject close to my heart. In February 1986, I initiated the first major congressional hearings on this subject, long before it was the popular buzzword out of everyone's mouth. A panel of experts flew in from London representing the securities and banking industries, and an equally impressive group testified from the same industries in the United States—in fact, I see that one of those institutions, Morgan Guaranty Trust Co., is represented again today.

We learned then that Great Britain had taken dramatic steps in its "big bang" to change its financial regulatory climate to foster open competition, particularly in the banking and securities area. The result? A swarm of new business, an explosive growth in jobs, and the transformation of a sleepy market into a dynamic financial center. Now I understand that Canada has taken a similar course in opening up its financial markets to all players. In fact, one of the sticking points in the negotiations on a free trade agreement was Canada's position that their financial markets have become much more open than ours, especially in banking and securities, giving our firms a competitive advantage there that Canadian firms do not have here. These are just two examples of how much and how fast the regulation of financial markets has changed.

Our globalization hearings in 1986 did not receive the attention they deserved because the subject was a new one then. But I think they started the process of waking people up to truly radical changes in financial markets, and I think today's hearing will do exactly the same thing. Taken together, the testimony then and now points to one clear conclusion: Congress must enact laws to allow our best financial firms to compete. Today they're operating under a prehistoric regulatory structure that threatens to turn them into dinosaurs. If Congress has any vision at all, and the guts to act, Congress will change that structure.

This is particularly true in the banking and securities area, and I welcome the chairman's recent efforts to take a new look at provisions in the Glass-Steagall Act. Anyone who follows this committee knows that the chairman and I have often worked together to make financial firms more competitive in this area. I look forward to working with him again, and I think the hearings today and tomorrow will show we need to roll up our sleeves and get to work soon.

STATEMENT OF SENATOR ALFONSE D'AMATO

Senator D'AMATO. Today the committee conducts another hearing on the need to restructure our financial system. This morning's pretense for reform or restructuring is that unless America changes its laws we are doomed to become a second-class player in the financial world. Proponents of financial restructuring argue

that we are doomed to this second-class status due to outdated and irrevelent laws that were written in the 1930's. Frankly, the grant of securities underwriting powers to U.S. commercial banks will not propel them back into the ranks of the world's 10 largest financial institutions. Further, Paul Volcker in his capacity as Fed Chairman, testified to this committee that American banks are on the cutting edge of the "international financial markets."

Before we hastily repeal these alleged "outdated and irrelevant laws," we must acknowledge that these laws have served our Nation's and the world's financial markets quite well. At the time these laws were passed, the world economies were reeling from a worldwide collapse of the financial system. This collapse had rather severe political as well as economic ramifications. Before we eagerly embrace the benefits of financial restructuring, the members of this committee should assess the downside risk of such "reform."

It may come as a surprise to many people who have witnessed the proceedings in this committee over the past 7 years, but I do favor reform of the financial system. However, my support of reform will be based upon several criteria. First, reform must not be piecemeal. Granting limited securities underwriting powers to a few big commercial banks does not constitute comprehensive reform. It must be designed to allow all those wishing to offer financial services to compete on a truly level playing field. To date, none of the relevant industry groups have endorsed reforms that create such a playing field. Understandably, each wants to preserve or to create a competitive advantage. Therefore, like the reforms of the 1930's, the financial restructuring that I would seriously contemplate would be comprehensive.

Second, the goals of our present financial regulatory system should be preserved. Our current framework mandates a segregated structure to promote an arm's length evaluation of credit worthiness. The justification for this separation of functions was and must remain premised on the assumption that independent institutions will act in their own interests as impartial decisionmakers. Thus, the neutrality of their decision will promote the goals of regulation—investor and depositor protection through a stable financial system devoid of built-in conflicts of interest.

This system has worked. No other nation has as many financial institutions and decisionmakers, and this diversity has made a significant contribution to the breadth, depth and efficiency of our market system.

It is now our task to work on a proposal that allows for a consolidation of the financial services industry without sacrificing the benefits to the ecomony of a segregated system. It seems that the times dictate that an appropriate regulatory framework should be in place before financial consolidations are authorized, or that Congress should at least consciously decide that such a framework is not needed. De facto decisionmaking made by Federal regulators or by neglect of the issues is not an adequate public policy position.

Finally, just a comment on one argument advanced by those favoring deregulation. The banks haved argued that they need expanded powers due to declining profitability of the current revenue sources. If "declining profitability" were a justification for chang-

ing public policy in the regulation of financial services, then the investment banks have an equally compelling argument to keep commercial banks out of their business because they are experiencing a period of declining profitability. For example, Salomon Bros. recently announced huge cutbacks in its work force at home and abroad. The Wall Streeet Journal states that: "The firm will lay off 800 people and pull out of the slumping muncipal bond and money markets business." Declining profitability is at best a two edge sword and at worst a nonsensical argument to justify reform of our financial system.

STATEMENT OF SENATOR DAVID KARNES

Senator KARNES. Mr. Chairman, as we reconvene our discussion about the issue of expanded powers for financial institutions, I want to take this opportunity to commend you Mr. Chairman, for your early resumption of these hearings. This committee just completed the process of marking up the tender offer Fairness and Disclosure Act which was a detailed and technical piece of legislation. I appreciate your public comments and leadership in this committee to fully address this issue and hopefully enact legislation prior to the expiration of the moratorium.

I have reviewed the testimony of the distinguished panel that has been assembled for these hearings on the globalization of the capital markets and certainly look forward to their constructive input on this issue.

The CHAIRMAN. Professor Richard M. Levich, professor of finance at New York University, has joined us.

We are delighted to have you, gentlemen.

Mr. Heimann, go right ahead, sir.

STATEMENT OF JOHN HEIMANN, VICE CHAIRMAN, MERRILL LYNCH CAPITAL MARKETS GROUP, NEW YORK, NY

Mr. HEIMANN. Thank you very much, Mr. Chairman. I am delighted to have the honor to appear before you again, and I thank you for this opportunity. Due to the limitations of time——

The CHAIRMAN. I am glad you mentioned that because I am hoping you gentlemen will confine your opening remarks to 10 minutes.

Mr. HEIMANN. Due to those limitations, Mr. Chairman, I request that my full statement be submitted.

The CHAIRMAN. Without objection, so ordered.

Mr. HEIMANN. I will place my comments within the time limitations that you have requested.

PERIOD OF CHANGE IN BUSINESS AND FINANCIAL SERVICES

Today we are living through a revolutionary period of change in the business of financial services. Deregulation is sweeping around the globe. Free market principles are being embraced by countries as different in outlook and development as France and Chile, Canada and the Soviet Union.

A new cycle of market capitalism, global rather than national, is being launched. Wherever we look we can see the powerful effect of the globalization of capital on the world's economy. The pace of

growth in the international money flows, for example, is nothing short of astonishing. It has doubled over each of the past 2 years and is expected to continue to soar.

Last year the international capital flows were roughly 15 times the volume of world trade. Foreign exchange transactions now run at the rate of $200 billion a day. That is why it is being said, and with good reason, that today it is the movement of capital, not trade, that is driving the world economy.

What does this portend for national and international economies as well as the world's capital markets? The truth is we cannot foresee much of what is around the corner, just as previous generations could not have known how seemingly small inventions—the light bulb and the telephone—transformed the way we work and we live.

BUSINESS OF FINANCE PERMANENTLY ALTERED

This unprecedented situation has been created by a combination of fundamental forces which during the past decade individually and together have permanently altered the business of finance. They are: The application of new technology to financial services, as noted by the chairman, the securitization of the world's capital markets, and the institutionalization of savings.

Let me explain. Without question, technology has been a basic catalyst of change. It has altered capital markets in two irreversible ways.

First, satellites, computers, and the like have permanently decentralized and in a sense democratized information, with instantaneous global communications now possible. For the first time in history we have a worldwide information system, linking markets 24 hours a day. Computers allow traders access to information simultaneously whether in Paris, Beijing, London or Tokyo.

Second, computers and high-speed data processing technology are responsible for the creation and proliferation of sophisticated securities products such as mortgage-related securities and complex hedging instruments that have led to the increased securitization of the world's markets.

A third powerful force has been the institutionalization of savings. As the New York Times recently noted, "Billions are rotated into stock markets by huge international players.

These international investors—large corporations, governments, pension funds, mutual funds, and individuals—control huge pools of money that slosh from one continent to another, filling up one stock market at the temporary expense of another."

These forces have triggered far-reaching structural change, notably worldwide deregulation. Countries may have moved at a different pace, each constrained by existing domestic structures and political considerations. Supervisory authorities may have chosen different approaches to regulating this new financial world.

However, a worldwide common thread is that governments have been driven by users of the system and changes in the marketplace, not the other way around. It has been a customer-driven, bottom-up revolution.

Deregulation is a term that covers a complex and evolving set of stages. Basically, however, when we speak of financial deregula-

tion, we are concerned about both the rules that govern markets, market regulation, and the rules that govern institutions operating within those markets, institutional regulation—often lumped together.

They are not only different but have varying repercussions. Market deregulation affects such basic structural issues as exchange rate controls, the rules governing foreign investment, taxation, repatriation of profits, interest rate controls, and fixed stock commissions—all of which have tended to stack the system in favor of domestic market participants and to stifle competition.

The United States significantly completed deregulation of its capital market system during the 1970's which inevitably acted as a catalyst for worldwide change. The United Kingdom's big bang transformed London into the world's most open capital market.

Japan remains the most regulated of the major capital markets. Recently, however, Japanese authorities have slowly begun to permit the creation of a money market, removed interest rate ceilings on large certificates of deposit, and created foreign membership on the Tokyo stock exchange.

And in Europe, EEC member nations have committed themselves to achieve total capital mobility within the European community by 1992.

In the United States, for example, with market deregulation well advanced, pressures to deregulate financial institutions have mounted. Commercial banks want to expand their investment banking activities, and a host of nonbank entities are clamoring to enter the field.

However, when institutional deregulation does arrive, as it seems bound to, neither the structure of the capital markets nor the economy as a whole will change. Instead, shifts between various participants within the financial industry will take place, much as they are now taking place in London and Japan and, in fact, in the United States. Each institution, therefore, will reexamine its strengths and weaknesses in light of a newly deregulated global market.

Basically, then, for the first time in history, global markets have created global competition, and global competition is reshuffling the world's financial institutions into a new environment and a new class of participation.

Once the dust settles, we will be operating with groups of financial intermediaries who will, in effect, be intermediating all of the markets of the world regardless of national origin.

Then there will be the national original players who have chosen to restrict their intermediation within selected boundaries and financial boutiques which specialize in narrow markets. In other words, the world's top financial institutions will not be categorized according to type, but more effectively by the size of their networks and their capital.

Moreover, the old concept of a dominant market center will give way to one congruent with 24-hour trading, and that is, the market that is dominant will be the market that is open.

As part of this vast reshuffling, we are already beginning to see a movement toward institutionalized harmonization between the nations.

For example, the central banks of the Group of Ten are close to an agreement on establishing common minimum standards for the capital adequacy of their commercial banks, are rationalizing their capital adequacy rules for banks around the world.

There will be a shared basis for assessing various types of bank capital. This, in turn, should enable banking systems to operate more effectively in today's rapidly evolving and competitive global marketplace.

To put it another way, we have a global marketplace and global financial institutions which are regulated by national standards, national structures, and national accounting policies. The inescapable conclusion which can be drawn from this overarching view is the structure of the world's financial system is being re-rationalized to meet the needs of its users.

Two, governments must review their national financial system in order to determine what changes, if any, are required to ensure that national financial intermediaries are able to prudently compete within the global context.

Three, the supervisory agencies responsible for national institutions must achieve the level of international cooperation and coordination to oversee global financial activity and global financial entities.

Thank you, Mr. Chairman.

[The complete prepared statement of John G. Heimann follows:]

-5-

The inescapable conclusions which can be drawn from this over-arching movement towards a globalized financial system are:

1. The structure of the world's financial system is being re-rationalized to meet the needs of its users.

2. Governments must review their national financial system in order to determine what changes, if any, are required to insure that national financial intermediaries are able to prudently compete within the global context.

3. The supervisory agencies responsible for national institutions must achieve the level of international cooperation and coordination to oversee global financial entities.

The CHAIRMAN. Thank you very much, Mr. Heimann.
Professor Levich.

STATEMENT OF RICHARD M. LEVICH, PROFESSOR OF FINANCE, NEW YORK UNIVERSITY, NEW YORK, NY

Mr. LEVICH. Thank you.

I would like to begin by stating my position on the issues of the Glass-Steagall Act. I believe the Glass-Steagall Act should be abolished and that commercial banks should be granted greater freedom of participation in securities activities and underwriting in the United States, if by doing so it does not entail serious risk to the banking system, but that it is essential to do so to keep commercial banks competitive on an international basis.

ABOLISH GLASS-STEAGALL

I am aware that many arguments have been made favoring retention of the Glass-Steagall Act provisions; for example, that securities underwriting is risky or that banks are special and that by removing Glass-Steagall provisions we could threaten the integrity of the payment system and the overall safety and soundness of the financial sector.

The argument has been made that banking is susceptible to various conflicts of interest such as between banks and corporations that might threaten the unbiased evaluation of loans or that could encourage open-sea securities offerings, that there could be openings between banks and trust accounts, threatening fiduciary responsibility, that there could be conflicts between banks and depositors or between banks and regulators, threatening the integrity of the Federal Deposit Insurance Corporation.

But I believe that none of these arguments really stands up to careful examination and that the evidence strongly suggests that by dropping the Glass-Steagall Act provisions and permitting commercial banks to establish separate securities affiliates that are free to fail or succeed as governed by market forces, that there would be gains for the United States in terms of the efficiency of resource allocation and that the risks involved would be small and manageable.

It must be stressed that various institutions and regulations that are now in place to deal with all of the arguments raised earlier

and are currently in place—particularly the stability of the monetary system, which is now assured by Federal deposit insurance and an effective central bank. and that the various provisions of the Securities Act, the Federal Reserve Act, the Bank Holding Act, and other regulations would prevent self-dealing, conflict of interest and other abuses that were cited earlier.

In effect, this committee is wrestling with the question of what-if questions: What would happen is some or all of the Glass-Steagall provisions were eliminated?

Specifically, thinking through the elimination of the Glass-Steagall Act and allowing market forces to prevail raises the following kinds of questions: Would there be excessive competition for underwriting services? Would there be excessive risk-taking? Would underwriting risks threaten the integrity of commercial banking's traditional role within the payment system—and other kinds of what-if questions.

To imagine what the U.S. banking industry would look like without Glass-Steagall restrictions, I propose that the experience of the Eurobond market over the last 20 to 25 years provides an illuminating piece of evidence. I have attached a paper which I have written on the subject to my testimony that I would like entered in the record.

EUROBOND MARKET

In that paper I argue that the Eurobond market is an appropriate laboratory for studying the possible effects of deregulation and supply on U.S. investment banking and other rationed services.

The experience of the Eurobond market I believe is relevant because, first, the Eurobond market offers 25 years of history with essentially unregulated securities activity with no entry restrictions.

Second, affiliates of U.S. commercial banks have been important participants in that market over most of the period. Thus, it offers us a chance to look at a freely competitive market and one in which affiliates of U.S. commercial banks have competed.

The basic question to explore is how well the Eurobond market has performed and whether its history should raise caution flags with respect to regulatory changes in the United States. The large volume of activity in the Eurobond market by itself indicates the dynamic and robust nature of market forces.

The evidence suggests that the Eurobond market has produced highly competitive but orderly market conditions. The composition of the top Eurobond underwriters has shown considerable movement over the last decade and history concentration ratios are considerably lower in that market than the domestic U.S. underwriting market, and there is considerable evidence that the relationship is switching—that is, issuers are moving freely from one lead manager to another to take advantage of market opportunities.

To be sure, problems such as the mispricing of new issues and syndicate discipline have been reported and discussed within the industry. To a great extent, I believe these problems affect individual firms and were shortlived. They were stopped by market discipline and did not threaten the longer term development of the market.

A combination of prudence, innovation, and self-interest on the part of large issuers and lead managers and members of the selling group and investors allowed this essentially unregulated market to survive and prosper. Underwriters do not use the absence of regulation as an opportunity to take excessive risks.

By eliminating Glass-Steagall, it is sometimes feared that the United States would be marching down the road toward universal banking and raising the chances for conflict of interest between fiduciary and underwriting activities and forging excessive linkages between banks and corporations and adding to the concentration of banking activities.

But it is important to stress that existing U.S. regulations regarding information disclosure, fiduciary responsibility, anticompetitive practices, and anticompetitive mergers would prevent similar developments in the U.S. market.

The 25-year experience of the Eurobond market offers convincing evidence that the large-scale capital market which includes the participation of commercial banks as well as investment banks can produce orderly and efficient results, even without substantial regulatory oversight. Existing U.S. regulation seems capable of dealing with the known abuses and points of concern about the linkages between commercial and investment banking activities.

Let me say a word now about international financial innovations and their importance for providing a competitive U.S. banking industry.

As has been noted, financial innovation has become a major force affecting the United States and other industrial economies. Innovation is not a new phenomenon. However, the pace of financial innovation has accelerated. It has been driven by improvements in technology and reductions in the cost of collecting and processing information, all of which are redefining the banking and financial services industry.

The buzz words are: Product innovation, securitization, liberalization, globalization, and increased competition. To a great extent, financial innovations have been driven by a desire to reduce the costs of market imperfections. A major feature of the innovative process has been the introduction of a wide variety of new products that trade in new market settings, thereby reducing the reliance upon banks for traditional credit instruments and credit evaluations.

Many of these new products—for example, currency interest rate swaps—are of obvious assistance for risk management purposes to enable the individual or firm to tailor its various dimensions of risk currency insurance, credit interest rates, default, and other kinds of dimensions—more precisely than ever before.

Other products, such as note issuance facilities or Eurocurrency commercial paper, appear to directly reduce the cost of funding of the desired financial position. The basic positions underlying today's new financial instruments are being refined and applied to yield still more products.

It is clear that the financial services industry is heading into a period in which reliance on traditional commercial bank products, credits and loans, will decline. Reliance on new products—securitized instruments, some with option-like features—will increase.

These developments make it more essential that commercial banks be allowed to take on the expanded functions and traditional securities activities if they are to stay competitive with foreign banks that have historically enjoyed these privileges.

That concludes my remarks.

[The complete prepared statement of Richard M. Levich follows:]

TESTIMONY BY JOHN G. HEIMANN
VICE CHAIRMAN - MERRILL LYNCH CAPITAL MARKETS
BEFORE THE SENATE BANKING COMMITTEE
OCTOBER 13, 1987

Mr. Chairman, Members of the Committee, my name is John Heimann. I am presently Vice Chairman of Merrill Lynch Capital Markets. I am delighted to have the honor to appear before this Committee to discuss globalization of the securities markets.

Today, we are living through a period of revolutionary change in the business of financial services. Deregulation is sweeping around the globe. Free market principles are being embraced by countries as different in outlook and development as France and Chile, Canada and the Soviet Union. And a new cycle of market capitalism, -- global, rather than national -- is being launched. Indeed, future generations may well view the globalization of capital and the shift from national markets to a global capital marketplace as a watershed of history, equal in its impact on human affairs as the shift in transportation from the horse and buggy to the automobile, and from the car to the jet.

Wherever we look, we can see the powerful effect of the globalization of capital on the world's economy. The pace of growth in international money flows, for example, is nothing short of astonishing. It has doubled over each of the past two years, and is expected to continue to soar. Last year, international capital flows were roughly 15 times the volume of world trade, with foreign exchange transactions alone in the area of $200 billion a day. That is why it is being said -- with good reason -- that today, it is the movement of capital -- not trade -- that is driving the world economy.

What does this portend for national and international economies, as well as the world's capital markets? The truth is, we cannot foresee much of what is around the corner, just as previous generations could not have known how two seemingly small inventions -- the light bulb and the telephone -- transformed the way we live and work.

To begin with, globalization has dramatically increased the size of the capital-market pie. For example, volumes on the world's major stock exchanges have skyrocketed. On the Paris Exchange alone, volumes more than doubled in a single year -- moving from almost $20 billion in '85, to over $47 billion in '86. In New York, volumes have risen from $970 billion in '85 to about $1.4 trillion in '86 to over $1 trillion in the first eight months of '87.

In addition, interest-rate Swap transactions have exploded: from $60 billion in '84 to $110 billion in '85 to $189 billion in '86. And perhaps most dramatically, cross-border equity volumes, which were a hefty $3.6 billion in '85, more than quadrupled in '86, adding up to $14.2 billion. Moreover, they were already close to $14 billion by September of this year. In short, wherever one looks, we are experiencing a worldwide capital explosion.

This unprecedented situation has been created by a combination of fundamental forces which, during the past decade, individually and together, have permanently altered the business of finance. They are: the application of new technology to financial services; the securitization of the world's capital markets; and the institutionalization of savings. Let's briefly review their impact.

Without question, technology has been a basic catalyst of change. It has altered capital markets in two irreversible ways. First, satellites, computers and the like have permanently decentralized and, in a sense, democratized information. With instantaneous global communication now possible, for the first time in history we have a worldwide information system linking markets 24-hours-a-day. Computers allow traders to access information simultaneously -- whether in Paris or Beijing.

Second, computers and high speed data processing technology are responsible for the creation and proliferation of sophisticated securities products, such as mortgage-related securities, and complex hedging instruments, that have led to the increased securitization of the world's capital markets.

A third powerful force for change has been the institutionalization of savings. As The New York Times recently noted, in a review of the world's major stock exchanges, "Billions are rotated into stock markets by huge international players. These international investors -- large corporations, governments, pension funds, mutual funds and individuals -- control huge pools of money that slosh from one continent to another, filling up one stock market at the temporary expense of another." Not only are institutional investors more receptive than individual investors to putting funds into a wider variety of investments around the globe, but they also have larger aggregates of funds to invest, and thus view risk differently. In a sense, then, they have upped the ante and, by doing so, changed the stakes for everyone.

These forces have triggered far-reaching structural change -- notably, worldwide deregulation. Countries may have moved at a different pace, each constrained by existing domestic structures and political considerations. Supervisory authorities may have chosen different approaches to regulating this new financial world. However, a worldwide common thread is that governments have been driven by users of the system and changes in the marketplace, not the other way around. It has been a bottom up, customer-driven revolution.

Deregulation is a term that covers a complex and evolving set of stages. Basically, however, when we speak of financial deregulation, we are concerned about both the rules that govern markets -- market regulation --and the rules that govern institutions operating within those markets -- institutional regulation. Often lumped together, they are not only different but have varying repercussions.

Market deregulation affects such basic structural issues as exchange rate controls, rules governing foreign investment, taxation, repatriation of profits, interest rate controls and fixed stock commissions -- all of which have tended to stack the system in favor of domestic market participants and to stifle competition. In recent years, market deregulation has become a pivotal first step toward developing a strong domestic capital market and improving access to international capital flows.

The U.S. significantly completed deregulation of its capital markets system during the 1970s which, inevitably, acted as a catalyst for worldwide change. The U.K.'s "Big Bang" transformed London into the world's most open capital market. Japan remains the most regulated of the major capital markets. Recently, however, the Japanese authorities have slowly begun to permit the creation of a money market, removed interest rate ceilings on large certificates of deposit, and permitted foreign membership on the Tokyo Stock Exchange. And in Europe, EEC member nations have committed themselves to achieving total capital mobility within the European community by 1992. Barriers to market entry by non-European financial institutions will also be removed. As you well know, in anticipation of significant deregulation, France, plus other European nations, have taken actions to broaden their capital markets by removing restrictions and increasing the number of competitors, both foreign and domestic. With these changes, national boundaries in Europe will no longer hinder the free flow of capital. Few would have thought such steps possible even a decade ago.

Recent events make it clear that institutional deregulation is triggered by market deregulation. Indeed, it is no exaggeration to say that in order to develop a strong domestic capital market and improve access to international capital flows, a stable market framework must be implemented and market deregulation initiated before meaningful institutional change can take place.

In the U.S., for example, with market deregulation well advanced, pressure to deregulate financial institutions is mounting. Commercial banks want to expand their investment banking activities, and a host of nonbank entities are clamoring to enter the field. Even without regulatory change, participants have found ways to work around the Glass-Steagall Act of 1933, which prohibited commercial banks from participating in the securities business. They have done so partly through innovative new products, and partly through legal and administrative loopholes. Merrill Lynch has its Cash Management Account; National Westminster has its full service brokerage. However, when institutional deregulation does arrive -- as it seems bound to -- neither the structure of the capital markets system nor the economy as a whole will change.

Instead, shifts between various participants within the financial industry will take place, much as they are now taking place in London, Japan and the U.S. Each institution must reexamine its strengths and weaknesses in light of a newly-deregulated global marketplace. This is particularly true for commercial banks.

In the U.S., commercial banks now routinely "securitize" assets held in portfolios and distribute these newly-created securities to non-commercial bank's investors. The good news for banks is a reduction in assets, increased capital adequacy and an increase in fee income and return on assets. The bad news is the rise of direct issuer access to the capital markets -- the most dramatic example of which is commercial paper -- by companies which used to obtain financing through commercial banks. They are now tapping the credit markets, often on better terms than the banks themselves. So we have the phenomenal rise of a commercial paper market, and the disintermediation of the banking system in the process.

Banks, faced with the loss of their best and highest-quality customers, have had to alter their strategies, both financial and structural. Faced with three choices -- to shrink in size, depreciate the quality of their assets or follow their historic customers into the capital markets -- it is not surprising that they are pushing, in the U.S., for an end to Glass-Steagall, so they can recapture the financial activities of their own prime customers.

Interestingly, Japanese banks are inhibited by Article 65, similar to the U.S. Glass-Steagall Act. Yet, Japanese authorities now permit foreign banks to own security affiliates, an activity prohibited by indigenous banks.

Basically, then, for the first time in history, global markets have created global competition. And global competition is reshuffling the world's financial institutions into four distinct classes. Once the dust settles, we will be operating in a new environment in which there will be: (1) a handful of large global players intermediating on all markets, regardless of national origin; (2) national and regional players, who have chosen to restrict their intermediating within selected boundaries; and (3) financial boutiques, specializing in narrow, lucrative markets. In other words, the world's top financial institutions will not be categorized according to type, but by the size of their networks and capital. Moreover, the old concept of a dominant market center will give way to one congruent with 24-hour trading -- and that is, the market that is dominant is the one that is open.

As part of this vast reshuffling, we are already seeing a movement towards institutional harmonization between nations. For example, the central banks of the Group of 10's leading industrial nations are close to an agreement on establishing common minimum standards for the capital adequacy of their commercial banks. By rationalizing the capital adequacy rules for banks around the world, there will be a shared basis for assessing various types of bank capital. This, in turn, should enable banking systems to operate more effectively in today's rapidly-evolving and competitive global marketplace.

REMARKS ON

THE EXPERIENCE WITH UNREGULATED UNDERWRITING ACTIVITIES IN THE EUROBOND MARKET AND RECENT INTERNATIONAL FINANCIAL MARKET INNOVATIONS

by

Richard M. Levich*

* Professor of Finance and International Business, and Chairman, International Business Department, Graduate School of Business Administration, New York University.

Prepared for the U.S. Senate Committee on Banking, Housing and Urban Affairs, for presentation on October 13, 1987.

I am pleased to have been invited here to present my views on the current regulations that effect the banking and financial services industry in the United States. The staff members of this Committee have requested that my testimony focus on two specific issues -- first, the restrictions on securities underwriting activities by commercial banks as mandated by the Glass-Steagall Act, and second, the implications of new and innovative financial products.

The Glass-Steagall Act as Public Policy

In the United States, there is a strong bias in favor of using market forces to guide the allocation of scarce economic resources. This historic bias is to a large extent the result of pragmatism, built upon both theoretical and empirical evidence that market forces (rather than centrally administered economies) tend to produce a more efficient allocation of resources and more favorable economic outcomes. Despite this general tendency, both theory and practice acknowledge that pure market forces need not always produce the best economic outcome for the nation as a whole. That is to say, "market failures" can and do exist. A standard example is the case of individuals or firms who, while acting in their own self-interest, may produce negative spill-over effects that adversely effect other individuals or firms. This divergence between private and social costs may call for public policies to correct a market failure.

Because of the highly integrated nature of the financial services industry and the important role played by banks in the delivery of monetary policy and in the economy in general, the need to consider the possibility of negative spill-over effects has been the legitimate concern of policymakers for most of this century. A question confronting policymakers is whether the co-mingling of commercial banking activities with underwriting and investment banking activities establishes the strong prospect for significant negative externalities. If the answer to this question is "Yes," then legislation resembling the Glass-Steagall Act may be appropriate.

In effect, this Committee is wrestling with a collection of "What if" questions, asking what would happen if some or all of the Glass-Steagall provisions were eliminated. Specifically, thinking through the elimination of the Glass-Steagall Act and allowing market forces to prevail, raises the following kinds of questions:

- Would there be "excessive competition" for underwriting services?
- Would there be "excessive risk-taking" on the part of the underwriting affiliates of commercial banks?
- Would underwriting risks threaten the integrity of commercial bankings traditional role within the payments system?
- Would the underwriting affiliates of commercial banks fall prey to conflicts of interest between investment trust activities and underwriting, or between lending activities and underwriting?
- Would underwriting activities enhance the likelihood of biased or unsound credit and loan appraisals?
- Would increased competition for underwriting services result in net benefits being passed along to borrowers?

To imagine what the U.S. banking industry would look like without Glass-Steagall restrictions, I propose that the experience of the Eurobond market over the last twenty years provides illuminating evidence.

Evidence from the Eurobond Market

In a paper that is attached to this testimony ("A View from the International Capital Markets," by Richard M. Levich, in Deregulating Wall Street, edited by Ingo Walter, New York: John Wiley Publishers, 1985), I have argued that the Eurobond market is an appropriate laboratory for studying the possible effects of deregulation in the supply of U.S. investment banking and underwriting services. The experience of the Eurobond market is relevant because (1) the Eurobond market offers 25 years of history with essentially unregulated securities activities and no entry restrictions, and (2) affiliates of U.S. commercial banks have been important participants in the Eurobond market over most of the period. Thus, the Eurobond market offers a chance to look at a freely competitive market and one in which affiliates of U.S. commercial banks compete.

To begin, it is important to stress that the Eurobond market has grown from essentially zero in 1960 to a primary issue volume of nearly $190 billion in 1986. The Eurobond market is thus a major world source for long-term capital that rivals the importance of the U.S. corporate bond markets. The Eurobond market developed because of a variety of regulatory differences (e.g. more relaxed standards for information disclosure, no withholding taxes on interest payments, bearer bonds) that offer advantages for both borrowers and lenders relative to traditional domestic bond markets.

The basic question to explore is how well the Eurobond market has performed and whether its history should raise caution flags with respect to regulatory changes in the United States. The large volume of activity in the Eurobond market by itself indicates the dynamic and robust nature of market forces. To some extent the market developed under favorable conditions, with the United States having adopted various regulations (i.e. Interest Rate Equalization Tax, Voluntary Foreign Credit Restraint Program, Office of Foreign Direct Investment) that favored the Eurobond market. But still, Eurobond underwriters operated subject to considerable risks: credit risk, foreign exchange risk, interest rate risk, underwriting risk, plus the the risk of new entrants to the market, and the risk that the U.S. would scrap its regulations favorable to the Eurobond market. (The U.S. did scrap the IET in 1974 and withholding taxes on interest payments to foreigners in 1984.)

Within this climate, Eurobond underwriters adopted strategies to enhance their performance. They encouraged larger syndicates to spread underwriting risks. They concentrated on sound credit risks and exchange listing of bonds to encourage demand. A gray market (or pre-market) was initiated to lay off risks and to increase information about fair pricing prior to issue date. And electronic clearing systems were developed to enhance secondary market trading and to solve paper work problems. All these strategies suggest a prudent response to actual market and competitive conditions.

The evidence suggests that the Eurobond market has produced highly competitive but orderly market conditions. The composition of the top Eurobond underwriters has shown considerable movement over the last decade with first German banks, then U.S. banks, and now Japanese banks holding down many of the top positions. Industry concentration ratios are considerably lower in the Eurobond market than in the domestic U.S. underwriting market. And there is considerable evidence of relationship switching, that is, issuers moving freely from one lead manager to another to take advantage of market opportunities.

To be sure, problems such as mispricing of new issues and syndicate discipline have been reported and discussed within the industry. To a great extent, these problems effected individual firms and were short-lived; they were stopped by market discipline and did not threaten the longer-term development of the market. A combination of prudence, innovation, and self-interest on the part of large issuers, lead managers, members of the selling group, and investors, allowed this essentially unregulated market to survive and prosper. Underwriters did not use the absence of regulation as an opportunity for taking excessive risks.

Conclusions Regarding Glass-Steagall

By eliminating Glass-Steagall, it is sometimes feared that the United States would be marching down the road toward "universal banking" and raising the chances for conflicts of interest between fiduciary and underwriting activities, encouraging excessive linkages between banks and corporations, and adding to the concentration of banking activities. But it is important to stress, that existing U.S. regulations regarding information disclosure, fiduciary responsibility, anti-competitive practices and anti-competitive mergers, would prevent similar developments in the U.S. market.

The 25 year experience of the Eurobond market offers convincing evidence that a large scale capital market, which includes the participation of commercial banks as well as investment banks, can produce orderly and efficient results, even without substantial regulatory oversight. Existing U.S. regulation seems capable of dealing with known abuses and points of concern about the linkages of commercial and investment banking activities. The decision to abolish Glass-Steagall restrictions could be framed in terms of a cost-benefit analysis. The costs are the increased risk to the banking system via bank/corporation, bank/trustee, bank/depositor relations. From the Eurobond market experience, the risks of permitting commercial banks to establish separate securities affiliates which operate at arms-length appear small and manageable. The benefits result from increased competition in the supply of investment banking services. Given the power of large corporations and their access to a competitive Eurobond market, the benefits of increased competition may be small for this group. However, allowing increased competition would make these benefits more certain and expand their availability to all U.S. firms.

Financial Innovation and a Competitive Banking Industry

Financial innovation has become a major force affecting the United States and other industrial economies. Innovation is not a new

phenomenon, however, the pace of financial innovation has accelerated. While the details of the process differ across countries, financial innovation reflects several common features including (i) Product innovation -- the development of new risk management and funding vehicles, (ii) Securitization -- a greater tendency toward market-determined interest rates and marketable financial instruments rather than bank loans, (iii) Liberalization -- of domestic financial market practices either through explicit deregulation or a breaking down of conventions, (iv) Globalization -- as national barriers erode and financial markets grow more integrated, and (v) Increased competition among financial institutions with many of the traditional distinctions between commercial banks, investment banks and securities firms becoming blurred in the process.

To a great extent, financial innovations have been driven by a desire to reduce the cost of market imperfections. Some of these imperfections are policy-related (e.g. taxes, regulatory barriers and information disclosure requirements) while others occur naturally (e.g. transaction costs, diverse expectations and diverse risk preferences). Innovations that overcome the former may directly thwart national economic policies, including useful prudential policies, while innovations that overcome the latter tend to increase economic (allocational) efficiency and to offer improved risk-return opportunities for individuals. As a result, policymakers face trade-offs in determining what manner and degree of innovation will be beneficial for macroeconomic performance and social welfare and how innovations themselves ought to be regulated.

A major feature of innovative process has been the introduction of a wide variety of new products that trade in new market settings, thereby reducing the reliance upon banks for traditional credit instruments and credit evaluations. Many of these new products (e.g. currency and interest rate swaps, currency and interest rate options) are of obvious assistance for risk management purposes -- to enable the individual or firm to tailor the various dimensions of risk (e.g. currency, maturity, credit, interest rate, default, and so forth) more precisely than before. Other products (e.g. Note Issuance Facilities and Eurocurrency Commercial Paper) appear to directly reduce the cost of funding a desired financial position. The basic principles underlying today's new financial products are being extended and re-applied to yield still more products.

It is not an exaggeration to claim that these developments are having a profound impact on all aspects of the financial services industry. For individual employees, innovation has affected the job description of the typical bank "lending" officer at major money-center banks, the human capital needed to perform well and even the definition of normal business hours. At the level of the financial services firm, innovation has affected the geographic location of activities, the financial product line, the risks that are being traded or carried, the identity of the major players and the intensity of competition. Non-financial firms are faced with a vast array of financial choices -- new financial markets and products, each with their own risk and return properties -- that require increasingly sophisticated analysis. Naturally, all of these factors feed into

macroeconomic performance.

These developments indicate that commercial banks will need to participate in a wider array of financial markets and transactions if they are to stay competitive and offer full services to corporate accounts. It is important to stress that most financial products typically "replicate" or represent some combination of existing financial transactions, Therefore, financial innovations need not add new market risks to the system; their power is to reduce the cost for agents to establish specialized combinations of risks and to dynamically adjust their positions to reach more desired risk/return combinations.

However, securitization does pose one specific example of potential welfare losses associated with financial innovation. Securitization and the increased use of financial intermediaries place the burden of credit evaluation on a larger pool of participants; the increase in market linkages may itself be seen as a source of added risk. To some extent, this may be because the new instruments lack transparency (i.e. they are not well understood) and they have not stood the test of two or three business cycles. But commercial banks have traditionally performed the credit analysis function, and should be counted on to have substantial expertise in this area. Increased reliance on the market system (i.e. adequate information disclosure of off-balance sheet items, marking-to-market of financial positions, and so forth) may provide an adequate remedy for fears over increased market linkages.

The most important observation to make is that the incentive for financial innovation -- self-interest, profit-maximization, risk optimization and technological change -- are powerful and at the foundation of a market system. Benefits such as lower transactions costs, greater liquidity, and improved opportunities for risk-sharing clearly accrue to those involved in the innovating and trading process. Natural barriers (in particular transaction cost and information barriers) that segment world capital markets are under pressure resulting in a tendency toward greater economic efficiency. In other words, forces leading toward further innovation and integration are not likely to abate.

At the macroeconomic policymaking level, financial innovation will heighten the need for international policy coordination. At the microeconomic level, it is clear that the financial services industry is heading into a period in which the reliance on traditional commercial bank products (credits and loans) will decline, and reliance on new products (securitized instruments, some with option-like features) will increase. These developments make it more essential that commercial banks be allowed to take on expanded functions in traditional securities activities, if they are to stay competitive with foreign banks that have historically enjoyed these privileges.

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Deregulating Wall Street, New York:
John Wiley, 1985

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10 A View from the International Capital Markets

RICHARD M. LEVICH

A major question facing U.S. policymakers today is whether existing restrictions on securities activities of U.S. commercial banks should be abolished as part of a broader program of banking and financial market deregulation, or whether policymakers should preserve the status quo. In the discussion of this issue, two points are often overlooked:

1. An essentially unregulated securities market, the Eurobond market, has existed for over 20 years.
2. U.S. commercial bank affiliates have been important participants in the Eurobond market and—where they are permitted to do so—in foreign securities markets as well.[1]

This historical experience suggests that it may be appropriate to examine the behavior of international capital markets, and to ascertain what lessons, if any, they hold for financial deregulation in the United States.

The purpose of this chapter is to offer a contribution to the debate on deregulation of investment banking activities by drawing on the experience in international capital markets. The evidence presented addresses two broad sets of issues:

1. Is it possible for private agents to organize the underwriting of securities, issuing and dealing functions in an efficient manner without restricting competitive forces?
2. Does the presence of agents (i.e., commercial banks) who engage in related financial transactions (e.g., accepting deposits, lending, managing trust funds, etc.) have any adverse effects on the underwriting and issuing markets, on related financial transactions (e.g., unbiased credit evaluations), or on the basic safety and soundness of the banking system?

One major segment of the international capital market, the Eurobond market, is our laboratory for exploring the first question. The Eurobond market, although not entirely free of regulation, operates under substantially fewer restrictions than those placed on domestic and foreign bond issues. In particular, there are no regulatory restrictions on firms wishing to engage in underwriting or dealing activities. Only economic factors—adequate financial capital, human capital, and appropriate technology—make it costly for firms to enter (or leave) the Eurobond market.

The Eurobond market may thus be studied as an example of how well the underwriting and issuing functions of a primary market are performed in an environment that is largely unregulated and open to competitive forces. Certain characteristics of the market—the concentration of underwriters, the allegiance of issuers to underwriters, the cost of underwriting services, and the cost of funds to issuers—might be taken as a standard of comparison against other markets.

In addressing the second question, the Eurobond market again offers a potentially useful source of evidence. Major foreign banks and offshore subsidiaries of U.S. bank holding companies compete head-to-head with more specialized investment banking or issuing houses. It will generally be the case that the major foreign and U.S. commercial banks will offer related financial services to corporate issuers and fiduciary services to other bank customers. Consequently, these banks may be thought to be more exposed to problems of conflict of interest and abuse of fiduciary trust than may be the case with more specialized issuing houses. The record of the Eurobond market is open to examination in this regard.

The second question might also be approached in another manner, by analyzing the primary issue markets in countries other than the United States. In many industrial countries commercial banking and investment banking are not formally separated, and commercial banks are not prohibited from underwriting corporate securities, including equities.[2] These foreign market settings offer another opportunity to analyze whether the combination of commercial and investment banking within one financial institution allows for a smoothly functioning primary issue market in which potential conflict of interest problems are manageable and public confidence in the safety and soundness of banks is maintained.[3]

Because of the great differences in macroeconomic policies, fiscal incentives and the institutional environment, however, we will argue that the experience with combined commercial and investment banking outside the United States is less relevant for our study. Indeed it will be argued that the thrust of regulation itself is fundamentally different in other industrial countries than in the United States.[4]

Consequently, we propose to focus on the Eurobond market as an arena in which both of our above research questions can be addressed. The Eurobond market is, first, an example of a largely unregulated market and second, a market in which institutions take on underwriting and investment banking duties in addition to their commercial banking functions. We propose that the analysis of the Eurobond market, in general, and the role played by banking institutions, in particular, is directly relevant for assessing the implications of expanding competition in the United States by allowing separately capitalized securities affiliates of commercial banks to engage in investment banking activities.

Our methodology is not that of formal hypothesis testing. Rather, we claim that

the Eurobond market and the U.S. corporate securities markets are comparable in the sense that our findings concerning the degree of competition or advantages to borrowers and lenders might apply equally to U.S. securities markets were the Glass-Steagall act to be abolished.[5] Our approach, therefore, is to appraise the overall development and success of the Eurobond market with its attendant problems and risks. We then attempt to infer what lessons there are in this experience for deregulation of U.S. financial markets.

The evidence presented in this chapter suggests that the Eurobond market has indeed "succeeded" in the sense that the market can survive without artificial support and continues to fulfill the very real demands of both borrowers and lenders. In the early years, the market enjoyed "protection" because of U.S. policies that pushed borrowers offshore. Still, fixed income securities underwriting could hardly be labeled risk-free in the post-Bretton Woods decade. Demand for Eurobond issues fluctuated with both exchange rate and interest rate expectations. To protect their interests while developing the market, underwriters adopted a variety of protective measures—for example, dealing with AAA clients to minimize credit risks; establishing large syndicates to spread underwriting risks; setting transaction costs high enough to provide an adequate cushion; and establishing "gray markets" to minimize the price risk of unsold securities.[6]

In addition, our analysis suggests that if the United States allows commercial banking and investment banking activities to take place within the context of a single bank holding company, the result will not be a system of "universal banks" that resembles those existing in Europe. This is because the concentration in the banking industry is, and is likely to remain, far less in the United States than in Europe; the linkages between corporations and banks are weaker in the United States than in Europe; and the thrust of regulation is vastly dissimilar. Furthermore, if the U.S. commercial banks were permitted to engage in investment banking activities, they would do so within the framework of regulations to establish minimum capital requirements for the new banking activities, and to insure adequate separation of personnel and organization between commercial and investment banking activities.[7] As a result, only a minority of the nation's 14,000 commercial banks would qualify to establish investment banking operations.

Evidence from the Eurobond market strongly suggests that, within its essentially unregulated environment with no artificial barriers to entry, underwriters have indeed behaved prudently. They organized a market, allowing substantial benefits to both borrowers and lenders, without incurring substantial risks. The evidence offers good reason to believe that U.S. commercial bank holding companies could similarly behave prudently in competition with U.S. investment banking houses without undermining the basic safety and soundness of the system. Regulation and supervision of commercial bank-related corporate securities underwriting and dealing activities would establish minimum capital requirements, adequate disclosure of information, and sufficient separation from commercial banking operations. The increased competition would in all likelihood result in significant net benefits to the economy at a minimal increase in risk.

The plan for the chapter is as follows. In the following section we present background information on the Eurobond market. The evidence clearly shows that the

Eurobond market is a major financial market offering a variety of advantages over domestic markets for both borrowers and lenders. An appraisal of the underwriting strategies and competitive characteristics in the Eurobond market is offered in the section entitled "Appraising the Performance of the Eurobond Market." The evidence presented here on industry concentration and switching among lead managers suggests greater competition in the Eurobond market than in U.S. corporate underwriting. In the section entitled "Problems and Risks in the Eurobond Market," we identify some of the problems and risks that have been associated with Eurobond market operations and review some of the corrective steps and innovations that have been introduced to deal with them. The scope for transplanting the spirit of Eurobond market competition is explored in the section entitled "Scope for Increasing Competition in U.S. Investment Banking." A summary and conclusions follow in the final section.

BACKGROUND INFORMATION ON THE EUROBOND MARKET

The purpose of this section is to describe the important operating characteristics of the Eurobond market, and to present a variety of statistical data indicating the size and scope of the market. We intend to show that the Eurobond market is indeed a major financial market, and that our later findings concerning the behavior of underwriters and investment bankers in this market may be indicative of behavior in other major markets such as the United States, were it to allow securities affiliates of commercial banks to compete in the financial services industry.

Citing World Bank records, Mendelsohn[8] reports that the first Eurobond was issued in 1957 for Petrofina S.A., the Belgian petroleum company. The issue was denominated in U.S. dollars in the amount of $5 million.[9] In 1982, the total of new Eurobond issues surpassed $59 billion.[10] Individual issues have sometimes exceeded $500 million.[11] By comparison, total bond issues in the United States by private institutions totaled $53.4 billion in 1982. Public government issues raised another $324.9 billion.[12]

The Petrofina issue illustrates the two key features of a Eurobond. A Eurobond is (1) underwritten by an international syndicate, and (2) offered for sale simultaneously in a number of countries. As a consequence of (2), the issue is usually denominated in a currency (or unit of account) that is foreign to a large number of the buyers. Mendelsohn[13] points out that with the introduction of the "bought deal," in which a single underwriter commits to an entire issue in advance, the first of these dimensions of a Eurobond may be lost as a distinctive feature of Eurobond issues.

In contrast, a *foreign bond* is an obligation of a foreign company that is underwritten by a syndicate of domestic investment banks, denominated in domestic currency and offered for sale in the domestic market. Examples of foreign bonds are *Yankee bonds*, dollar obligations of non-U.S. firms underwritten and issued in the United States, and *Samurai bonds*, yen obligations of non-Japanese firms underwritten and issued in Japan.

Table 10.1 presents data on the yearly flow of international bond issues. On av-

Table 10.1 International Bond Issues, 1970–1981

		Foreign				Foreign		
Dates	Eurobonds	Outside U.S.	Inside U.S.	Total	Eurobonds	Outside U.S.	Inside U.S.	Total
	(in millions)				(percentage)			
1970	US$2,966	US$378	US$1,216	US$4,560	65.0%	8.3%	26.6%	100.0%
1971	3,642	1,538	1,104	6,284	58.0	24.5	17.6	100.0
1972	6,335	2,060	1,353	9,748	65.0	21.1	13.9	100.0
1973	4,193	2,626	1,019	7,838	53.5	33.5	13.0	100.0
1974	2,134	1,432	3,291	6,857	31.1	20.9	48.0	100.0
1975	8,567	4,884	6,460	19,911	43.0	24.5	32.4	100.0
1976	14,328	7,586	10,602	32,516	44.1	23.3	32.6	100.0
1977	17,735	7,185	7,286	32,206	55.1	22.3	22.6	100.0
1978	14,125	14,359	5,795	34,279	41.2	41.9	16.3	100.0
1979	18,726	17,749	4,515	40,990	45.7	43.3	11.0	100.0
1980	23,970	14,521	3,429	41,920	57.2	34.6	8.2	100.0
1981	31,616	13,817	7,552	52,985	59.7	26.1	14.3	100.0
Average	12,361	7,344	4,468	24,174	51.1	30.4	18.5	100.0

Source: Morgan Guaranty Trust Company, *World Financial Markets*, various issues.

erage, the share of Eurobonds and foreign bonds in the market is roughly equal. The average annual growth rate of Eurobond issues over the period 1970–1981 was 22%. Many of the important characteristics of the various bond issues are displayed for comparison in Table 10.2.

We wish to focus our attention next on differences in regulatory treatment and issuing costs, factors that should influence the propensity of borrowers and lenders to converge on a particular market. We have been careful not to suggest that the Eurobond market operates in a climate free from all regulation. Although there is no official regulation of the Eurobond market per se, every Eurobond issue "must conform with the laws and regulations of the country in which it is offered for sale."[14] However, this does *not* mean meeting local requirements for public offerings. For example, bonds may be offered for sale initially in the United States if they are registered with the SEC under the 1933 Act. Eurobonds are not registered under the 1933 Act, although they can still be sold in the United States *after* distribution abroad has been completed and they have been seasoned in the *secondary market*.[15] In practice, many foreign countries apply less restrictive regulations than exist in the United States, or apply fewer restrictions on Eurobonds than on domestic bonds. In most cases, the method of offering Eurobonds allows them not to be classified as "public offerings," and they are, therefore, not national securities subject to regulation.[16]

Because Eurobonds are issued under minimal formal regulatory control, the issuer avoids the kind of detailed and standardized disclosure requirements that are part of U.S. bond issues. Document preparation can be costly for U.S. issuers in the domestic capital market, but it may be prohibitive for non-U.S. firms in cases where accounting statements are not in accordance with American principles or where there is great reluctance to release certain types of information to the public. Eurobonds are frequently exchange-listed (in Luxembourg, London, or Singapore) and therefore disclosure requirements must conform to exchange practices in those financial centers. Exchange listing is a device to increase the marketability of bonds among institutions and is not a necessary (but highly desirable) feature of Eurobonds. In practice, very few secondary market transactions take place on the exchanges.[17] Regulation, therefore, is largely absent.

Unlike bond issues in the United States, the timing of domestic and foreign issues abroad is generally controlled by the local regulatory body.[18] Queuing of new issues is an important tool of macroeconomic policy outside the United States. In this manner, governments seek to avoid "congestion" in the capital market, achieve interest rate targets, allocate places in the queue according to national economic or sectional priorities, and allow the government a clear run at local capital markets.

Although it is claimed that queuing regulations do not operate in the Eurobond market, in fact this is only true in the U.S. and Canadian dollar segments of the market.[19] In other markets, notably Germany, the authorities do in fact regulate the issuance of Eurobonds denominated in domestic currency.[20] Again, these rules reflect the operation of macroeconomic policy within a small, open economy in which policymakers attempt to manage their exchange rate as well as interest rates. For domestic authorities, control over the volume of offshore issues denominated in domestic currency is important for achieving exchange rate and interest rate targets. Presumably,

Table 10.2 Comparative Characteristics of Bond Issues in International Bond Markets

	Domestic Bonds (U.S. Market)	Foreign Bonds (non-U.S. Market)	Eurobond Market
1. Regulatory bodies	Securities and Exchange Commission	Official agency approval	Minimum regulatory control
2. Disclosure requirements	More detailed higher initial expense higher ongoing expense may be onerous to non-U.S. firms	Variable	Determined by markets practice
3. Issuing costs	0.75–1.0%	Variable to 4.0%	2.0–2.5%
4. Rating required	Yes	Usually not	No
5. Listing	Listing separate	Listing usual	Listing usual
6. Queuing	No formal queue	Usually queue	No queue
7. Currency of denomination	U.S. does not restrict use of $	Many foreign countries (Germany, Switzerland) restrict use, part of queuing	No restrictions on U.S. and Canadian $
8. Speed	Relatively slow Rule 415 may speed up process.	Variable	Usually fast "Bought deal"
9. Borrower/Issuer incentives	Larger market, greater depth Disclosure may be costly to foreigners	Local visibility, Diversification of sources	Lower annual interest expense Speed of placement to capture advantageous windows Cannot sell issue in U.S. until 90-day seasoning
10. Lender/Investor incentives	Greater depth and liquidity More standardized information disclosed	Currency diversification gain	Currency gains Bearer bonds No withholding tax on interest

Source: Adapted from Antione W. Van Agtmael, "Issuance of Eurobonds, Syndication and Underwriting Techniques and Costs," Section 5.2 in A. George I. Giddy (eds.), International Finance Handbook. (New York: Wiley, 1983), p. 5.

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authorities could prohibit domestic sales of any unauthorized issue, which would effectively destroy the market for it. Only the United States and Canada do not place restrictions on the use of their currencies for Eurobonds. Mendelsohn[21] argues, therefore, that only the U.S. and Canadian dollar segments of the market are "true" Eurobonds, reflecting pure market forces.

Because of these regulatory differences, a Eurodollar bond issue can usually be organized and placed more quickly than a comparable U.S. domestic market issue. SEC Rule 415, permitting shelf registration, has reduced the time necessary to launch a U.S. domestic issue, but the Eurobond market may still have certain advantages, especially in the case of a "bought deal."[22] Speed allows the issuer the benefit of seizing favorable "windows" when interest rates are viewed as being unusually low.

Gross spreads in Eurobond issues appear to be relatively high when compared to the U.S. domestic market, but moderate to low in comparison with other European markets (see Table 10.6). It is generally agreed that the selling concession built into Eurobonds is relatively high, and that this plays an important role in primary market pricing (as we will discuss in the next two sections).[23] Offsetting the high spreads, annual interest expense is generally lower in the Eurobond market than in domestic markets. The average size of this interest differential is difficult to measure, but in May 1982, the yield advantage of the Eurobond market to U.S. borrowers was roughly 75 basis points for a five-year issue.[24] Investors have been willing to pay a higher price for Eurobonds than, for example, comparable domestic bonds of the same U.S. firm because Eurobonds are generally issued in bearer form, and there are no taxes withheld on interest payments. Recent U.S. legislation has removed the 30% withholding tax on new issues of government and corporate bonds sold to foreigners. This new development may pose a considerable challenge to the Eurobond market. Historically, however, the actual cost of funds has been lower in either the Eurobond market or domestic capital markets, depending on prevailing conditions.

The overall growth in Eurobond issues was pointed out in Table 10.1. It is important to highlight other key dimensions of the market. Table 10.3 shows the breakdown of Eurobond issuers. Almost half of all issues were by governments, state enterprises, or international organizations. U.S. companies were responsible for 13.5% of all issues. The distribution of Eurobond issues by currency of denomination is reported in Table 10.4. Overall, the Eurodollar segment accounts for two-thirds of

Table 10.3 Eurobond Issues, 1972–1981

	Value (in millions)	Percentage
U.S companies	US$19,088	13.5
Non-U.S. companies	52,855	37.3
State enterprises	35,777	25.2
Governments	20,743	14.6
International organizations	13,266	9.4

Source: Morgan Guaranty Trust Company, *World Financial Markets*, various issues.

Table 10.4 Eurobond Issues by Currency of Denomination, 1972–1981 (in millions of U.S. dollars)

Currency	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1972–1981 (percentage)
U.S. dollar	$3,908	$2,447	$996	$3,738	$9,125	$11,628	$7,290	$12,565	$16,427	$26,830	67.0%
Deutsche mark	1,129	1,025	344	2,278	2,713	4,109	5,251	3,626	3,607	1,277	17.9
Dutch guilder	393	194	381	719	502	361	394	531	1,043	529	2.9
Canadian dollar	15	0	60	558	1,407	674	0	425	279	634	2.9
French franc	491	166	0	293	39	0	0	NA	NA	NA	0.7
European Composite Units	0	99	174	371	99	28	165	253	65	309	1.1
Other	398	262	179	610	443	935	1,025	1,326	2,549	2,037	6.9

Source: Morgan Guaranty Trust Company, *World Financial Markets*, various issues.

Note. NA—figures not available.

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Table 10.5 Secondary Market Turnover: Trading Volume, 1972–1982 ($ billion equivalent)

	Euro-clear	Cedel	Total
1972	11.0	6.0	17.0
1973	11.1	10.2	21.3
1974	8.2	8.1	16.3
1975	14.3	14.2	28.5
1976	37.0	29.7	66.7
1977	65.2	38.6	103.8
1978	77.1	39.7	116.8
1979	102.8	54.7	157.5
1980	160.5	80.3	240.8
1981	242.0	155.0	397.0
1982	510.0	332.0	842.0

Sources: Years 1972–1980 are from Frederick G. Fisher, *International Bonds*. (London: Euromoney Publications, 1981), p. 177. Years 1981–1982 are from Peter, Koenig, "The Great Liquidity Debate," *Institutional Investor*, (May 1983a), pp. 153–66.

Note: Total excludes the majority of deutsche mark denominated bonds, which are handled through the German Kassenvereine system.

the market, but there is considerable variation from year to year. In 1978, when the dollar was declining sharply on foreign exchange markets, the Eurodollar segment was 51.6% of the market. In 1982, with foreign exchange conditions reversed, the Eurodollar share reached 85%. The average size for new Eurodollar issues exceeds $100 million (see Figure 10.1), a good deal larger than for nondollar denominated issues. Secondary market trading in Eurobonds has grown simultaneously with new issue volume, as illustrated in Table 10.5. The average maturities for new Eurobond issues is plotted in Figure 10.3. The general trend for maturities is clearly downward, reflecting the increase in risks associated with interest rate and exchange rate volatility.

APPRAISING THE PERFORMANCE OF THE EUROBOND MARKET

In this section we offer an analysis of the performance of the Eurobond market as an institution. We begin by describing the initial conditions when the first Eurobond issues were launched. A discussion of strategic steps taken by Eurobond underwriters in order to develop the market follows, and we then assess the competitive conditions that have resulted in Eurobond underwriting.

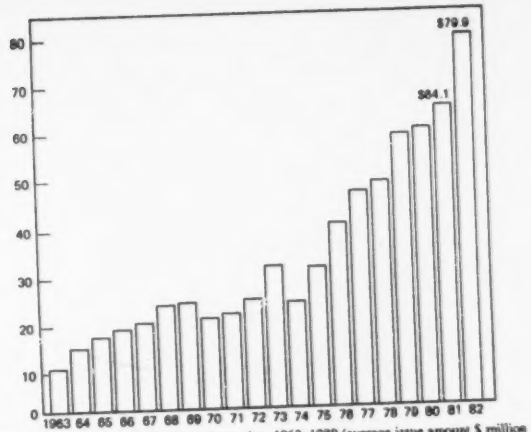

Figure 10.1a Growth in Eurobond issue size, 1963–1980 (average issue amount $ million equivalent)

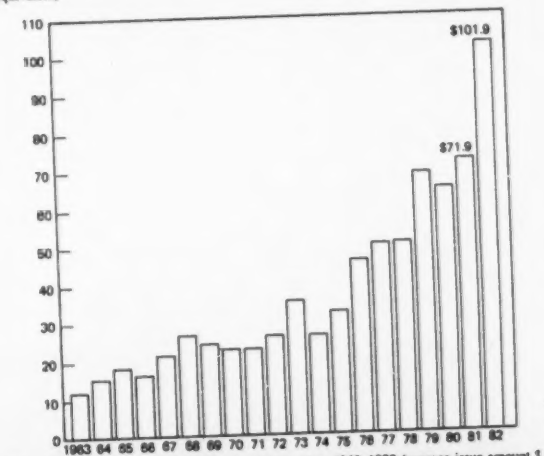

Figure 10.1b Growth of Eurodollar bond issue size, 1963–1980 (average issue amount $ million)

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Economic Policies and Euromarkets in 1963

As noted earlier, the first Eurobond issue occurred in 1957. Over $500 million was raised through 22 Eurobond issues over the period 1957–1962.[25] At about this time the Euro*currency* market—the offshore market for short-term loans and deposits—was taking shape. Given the large share of international transactions denominated in dollars, it was reasonable to predict that Europeans and other offshore residents would soon demand longer-term offshore assets denominated in dollars, as well as Eurocurrency deposits. Although natural forces were in place, the development of the Eurobond market was enhanced by the enactment of the Interest Equalization Tax in the United States, taking effect on July 18, 1963.[26] The IET was proposed as a temporary measure to reduce U.S. capital outflows and take pressure off the U.S. balance of payments deficit. The IET operated like an excise tax on American purchases of new or outstanding foreign stocks and bonds. To no one's surprise, the IET effectively closed the Yankee bond market; to the surprise of some, the foreign borrowers simply migrated offshore to London and Luxembourg.[27]

A second major stimulus to the development of the Eurobond market was the imposition of the Office of Foreign Direction Investment (OFDI) controls on U.S. multinationals financing of their overseas ventures. The controls began in February 1965 on a voluntary basis and were made mandatory in January 1968 to reduce U.S. capital outflows and improve the balance of payments. By 1968, the OFDI controls effectively forced U.S. multinationals offshore to meet their financing needs for foreign projects.

Both the IET and OFDI controls were extended several times until January 1974, when both were scrapped. In 1974, with both foreign borrowers and U.S. multinationals free to use U.S. capital markets, the volume of Eurobond issues fell to $2.1 billion, its low for the decade. However, volume has been rising sharply and more or less steadily ever since.

The Eurobond market has survived and prospered because it satisfies economic demands that are not fulfilled by other markets. Earlier, it was suggested that some demand for Eurobonds is natural, because many non-Americans desire to issue or hold dollar-denominated securities. Demand was increased further because securities sold by U.S. companies domestically are generally in registered form, and, until July 1984, the United States applied a 30% withholding tax on interest payments to foreigners. One could also argue that for some groups of borrowers (e.g., large, well-known firms) and investors (e.g., large, well-informed), domestic security market regulations represent a disincentive that can be reduced with little risk by taking transactions offshore.[28]

Fisher[29] notes with appropriate irony that the U.S. IET controls, "intentionally prejudicial" to non-American borrowers, ultimately led to the "largest international capital market the world has known." The 1963–1974 period of relative protection was essential for Euromarket participants to develop professional relationships among themselves, client relationships with issuers, as well as the issuing techniques appropriate to the new market.[30] It would be a mistake, however, to assume that the Eurobond market developed in a risk-free environment. As in any securities market,

interest-rate and credit uncertainties led to investment and underwriting risks. In addition, the currency of denomination for most Eurobonds was foreign to most investors, and so underwriters faced the risk that demand for bonds would shift because of unexpected exchange rate movements. As we have seen (Table 10.4) investors were more willing to accumulate an issue if the currency of denomination was expected to appreciate. Existing Eurobond underwriters always faced the risk that the IET would be scrapped, and in 1974, when the IET was finally eliminated and OFDI controls were phased out, Eurobond market volume collapsed to one-third the 1972 level (Table 10.1). Finally, because there were no regulatory barriers to entry, existing underwriters have faced the risk of entry by new competitors. And as we have seen, this competition may also come from the U.S. domestic market now that withholding taxes on interest payments to foreigners have been abolished.

Strategies of Eurobond Underwriters

To operate in this new market, Eurobond underwriters developed a variety of strategies and techniques to expand the market while controlling risks. The standard syndicate structure in the Eurobond market is described by the three-tier framework illustrated in Figure 10.2. Members of the underwriting syndicate agree to buy the issue from the issuer. In the U.S. domestic market, all underwriters are signatories to the underwriting agreement, and therefore have a "direct (several) obligation to the issuer."[31] In the Eurobond market, *underwriters* (as the term appears in Figure 10.2) in Englishstyle (but not Americanstyle) deals bear *no* obligation to the issuer.[32]

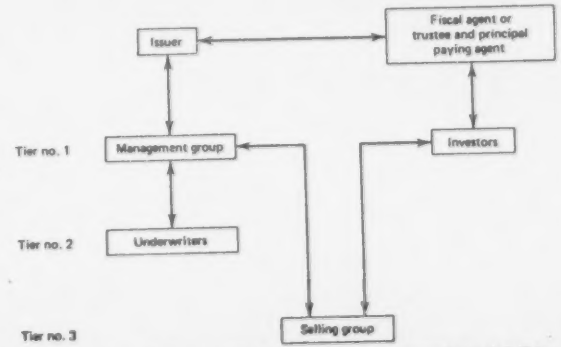

Figure 10.2 Three-Tier Framework for Eurobond syndication. (*Source:* Frederick G. Fisher, *International Bonds*, Euromoney Publications, London, 1981, p. 75.)

There is also a selling group with no underwriting responsibility. Once an allocation of securities is made, all parties are free to sell the issue as they see fit.[33] The lead management group attempts to instill discipline through economic incentives and disincentives, such as refusing to invite a seller into future syndicates. Large syndicates are used in efforts to maximize market demand and insure a successful issue. In the late 1970s, underwriting groups grew to 175 firms with an additional 150 members in the selling group.[34] Naturally in groups this large, some members would be unable to place their full allocation, resulting in price-stabilization and discipline problems for the lead managers. Because Eurobonds are chiefly in bearer form, members of the selling group could unload unwanted bonds in a discreet way with little probability of being traced.[35]

The *gray market* or *premarket* involves a set of activities that formalize trading in Eurobonds prior to the official offering date. Professional dealers display their transaction prices over the Reuters Monitor and a market price is established.[36] Other sources publish gray market prices more widely.[37] The gray market reduces risks for members of the selling group by allowing them to participate in an organized market if conditions (demand for bonds, interest rate, or exchange rate developments, etc.) do not evolve as expected. The gray market also alleviates risks for lead managers because it provides additional information on the market's response to the issue (i.e., the extent of dumping) and whether the terms of the issue ought to be altered. The gray market can, in addition, provide information on the extent of "overpricing" to investors who pay full price on the day of issue. This concern arises because, as we noted in the previous section, there is reason to believe that spreads (in particular the selling concession) are relatively high on the Eurobond market. A large selling concession may have been appropriate in terms of sales to individuals or as a sweetener to attract sellers in a newly developing market. But large institutional buyers in the Eurobond market have had the power to force distributing groups to share all or part of the selling concession.[38] The market can thus exhibit a two-tier pricing system on any given issue.[39]

Managers and underwriters in the Eurobond market have adopted a number of straightforward procedures to increase the demand for bonds and to be compensated for additional risks. The Eurobond market began as a market for high-quality borrowers, and it continues to be dominated by recognized names. Higher quality compensates for limited information disclosure.[40] Most Eurobonds are listed on stock exchanges, as a marketing device to make the securities eligible for some institutional portfolios, to comply with legal requirements for sales in many countries, and to promote investor confidence. Both Moody's and Standard & Poor provide Eurobond ratings services. Spreads increase with the maturity of Eurobonds (see Table 10.6) to compensate for the greater risks involved.[41] We have also observed the average maturity of Eurobonds has declined (see Figure 10.3) as interest-rate risk has increased.

Eurobond underwriters have invented or adapted other innovative syndication approaches and issuing techniques. Prior to 1979, the standard Eurobond invitation telex included the expected coupon rate based on current market conditions. In contrast, U.S. domestic issues were priced on a yield basis after intensive discussions between

Table 10.6 Comparative Gross Spreads in International Bond Markets

	Total	Underwriting Commission	Management Fee	Selling Concession
U.S. domestic market				
estimate 1[a]	0.875–1.0%	0.175	0.200	0.500
estimate 2[b]	0.75 –1.0	NA	NA	NA
estimate 3[c]	0.60 –1.3	NA	NA	NA
Foreign Equity and Bond Markets				
United Kingdom[d]				
Domestic bond market	2.5%	NA	NA	NA
Germany[e]				
Stocks	4.0%	NA	NA	NA
Bonds				
Public	1.625–2.0	0.375–0.5	0–0.25	1.125–1.25
Industrial	2.5	1.00	0.25	1.25
International	1.75 –2.0	0.50 –0.75	0.25	1.00
France[f]				
Bonds				
First category	1.75%	0.50	0.10	1.15
Second category	3.00	0.75	0.25	2.00
Switzerland[g]				
Bonds				
Government	1.50%	NA	NA	NA
Foreign	3.00	NA	NA	NA
Eurobond market[h]				
Under 5 years	2.00%	0.375	0.375	1.25
5–8 years	2.25	0.375	0.375	1.25
more than 8 years	2.50	0.500	0.500	1.50

Notes: [a]M. S. Mendelsohn, *Money on the Move*. (New York: McGraw-Hill, 1980), p. 183; and Mendelsohn "Eurobond Markets," 1983, p. 18.
[b]Antoine W., Van Agtmael, "Issuance of Eurobonds: Syndication and Underwriting Techniques and Costs," Section 5.2 in A. George I. Giddy (eds.), *International Finance Handbook*, (New York: Wiley, 1983), p. 5.
[c]Frederick G. Fisher, "Imagination Wins Again," *Euromoney* (February 1981), p. 81.
[d]James E. Maycock, "United Kingdom: Banking, Money and Bond Markets," Section 4.3 in A. George and I. Giddy (eds.), *International Finance Handbook*. (New York: Wiley, 1983), p. 5.
[e]Gunter Dufey, and Krishnan, E., "West Germany: Banking, Money and Bond Markets," Section 4.4 in A. George and I. Giddy (eds.), *International Finance Handbook*. (New York: Wiley, 1983), p. 22.
[f]Florin Aftalion, and Bompaire, Frederick, "France: Banking, Money and Bond Markets," Section 4.5 in A. George and I. Giddy (eds.), *International Finance Handbook*, (New York: Wiley), 1983, p. 7.
[g]Mario A. Corti, "Switzerland: Banking, Money and Bond Markets," Section 4.6 in A. George and I. Giddy (eds.), *International Finance Handbook*. (New York: Wiley, 1983), pp. 40, 45.
[h]M. S. Mendelsohn, *Money on the Move*. (New York: McGraw-Hill, 1980), p. 184.

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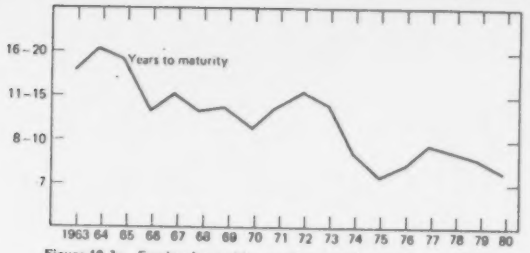

Figure 10.3a Eurobond maturities: yearly weighted average, 1963–1980

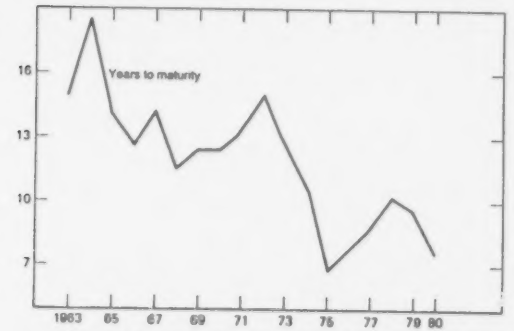

Figure 10.3b Average Eurodollar bond maturities, 1963–1980

the lead manager and other syndicate members. Consequently a U.S. syndicate could better fix a yield consistent with secondary market conditions and investor demand. Coupon, issue price, and total commissions were set after the selling period without being indicated in the invitation telex.[43] The Eurobond market adapted this U.S. market practice, known as *yield pricing*, enabling the lead manager to work with a smaller syndicate, improve pricing control, better estimate demand, and reduce the need for discipline.

The *bought deal* or pre-underwritten issue was introduced in early 1979. The underwriter telexes that funds are available on specific terms for a short period. If the deal is accepted and successful, the issue should close quickly, the lead manager alone placing most or all of the issue. Under volatile market conditions, the speed of a bought deal is valuable to issuers, but the manager is exposed to greater underwriting risks.[43]

Other examples of issuing techniques are the *auction issue, conversion issue, multiple-tranche issue, deferred purchase issue, convertible issue,* issues *indexed to commodities* or *currencies,* and issues *with warrants attached.*[44] To some extent, these techniques may be viewed as fads or sweeteners to address uncertainties that momentarily concern the market. Some issuing innovations, such as *floating rate notes,* however, have captured substantial market shares and seem to be a permanent and growing feature of the market.[45]

Finally, we should mention the role of Euro-clear and Cedel, the two computerized depositary, clearing and information networks for the Eurobond market. Both systems were founded by private parties—Euro-clear in 1968 by Morgan Guaranty Trust Company and Cedel in 1971 by a group of shareholder institutions. In 1972, Morgan Guaranty sold 97% of its interest in Euro-clear to a group of 120 user shareholders,[46] but it continues to manage the system. In 1980, a bridge linking the two systems came into operation.[47] Fisher[48] argues that competition has forced the two systems to become increasingly similar, but Euro-clear maintains a two-thirds market share (see Table 10.5). Both systems, in conjunction with the Reuters Monitor, have improved the technological efficiency of trading in the Eurobond market and promoted new-issue volume.

Asssessing Competitive Conditions in the Eurobond Market

In an important sense, a free market that grows from nonexistence to $50 billion annual new issues in 20 years is a success, by definition. Clearly, the Eurobond market brings together a large number of willing borrowers and lenders with substantial benefits to both groups. Beyond gains to the direct participants, the market fills a gap in international capital markets, speeding the traditional recycling of funds in the 1970s and allowing time for adjustment between deficit and surplus economies.[49] Our objective now is to characterize the orderliness of that free-market setting.

First, in the entire history of the Euromarkets, no bank has failed solely or even mainly because of Eurobond underwriting.[50] The worst shock to hit the market was the failure in June 1974 of Bankhaus Herstatt, a relatively small German institution. The collapse of Herstatt was the result of imprudent foreign exchange activities. In terms of bond defaults, Mendelsohn[51] reports that in the period 1963–1977, $72 billion was raised through 2700 Eurobond issues. Losses to *investors* were 0.24% ($170 million) because of default by 10 small U.S. companies.[52]

The composition of leading Eurobond underwriters has changed considerably during the history of the market. The top 20 underwriting firms as of 1982 and their rankings since 1978 are given in Table 10.7. Among the top 10 firms in 1982, we find five American firms. Of the top 10 firms in 1978, only three (Crédit Suisse First Boston, Deutsche Bank, and Warburg) remained in the top 10 of 1982. Part of the shuffling of ranks is the result of exogenous events—DM weakness on the foreign exchange market prompted the German authorities to be cautious about allowing new DM issues (almost always led by German banks), continued dollar strength has increased demand for Eurodollar bonds (often managed by U.S. houses), and U.S.

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borrowers have returned to the market in large numbers (generally choosing U.S. underwriters). In 1978 the situation was reversed, and German and Swiss banks dominated the list with only two U.S. houses in the top 20. Mendelsohn[53] notes that, going back 10 years further, U.S. houses again dominated the list as American companies, driven away from the U.S. market by OFDI requirements, were heavy borrowers in the Eurobond market. Only in the 1970s did "placing power" assume importance and cause the Swiss, German, and other European banks to enter into the top ranks of underwriters.

Concentration ratios for Eurobond underwriters are reported in Table 10.8. Percentage shares are calculated by awarding full credit to a lead manager and equal credit to joint lead managers. The data suggest a slight decline in concentration among the top 10 houses, but this may reflect the decline in the role of the DM after 1978. Comparable ratios for U.S. investment banking are shown in Table 10.9, which gives full credit to the lead manager. The market share of the largest firm is approximately the same in both the U.S. and Eurobond markets. However, the concentration ratios for the largest five through 25 firms is considerably smaller in the Eurobond market. The inference is that competitive forces are greater among Eurobond underwriters. (Note that affiliates of U.S. commercial banks listed in Table 10.7 include Morgan Guaranty, Citicorp, and Manufacturers Hanover.)

In their study of U.S. investment banking, Hayes et al.[54] argue that the stability of client relationships over time is a significant indicator of competition. Switching of relationships suggests the presence of competitive forces, whereas inertia in relationships may create a persistent state of market disequilibrium. The authors conclude that although relationships give the appearance of fluidity, the major apex firms have maintained a firm hold on the large and important clients in the U.S. domestic market. However, we may expect to observe some differences between "bought

Table 10.8 Concentration Ratios in Eurobond Underwriting, 1978–1982

	1978	1979	1980	1981	1982
Top 1	23%	11%	10%	13%	15%
Top 4	45	30	29	32	38
Top 5	49	34	33	37	41
Top 8	56	44	43	47	52
Top 10	61	49	47	52	57
Top 15	70	60	57	63	65
Top 25	82	76	72	76	77

Source: Prepared by Clifford Austin Billinghurst from *Investment Dealers' Digest.*

Note: Eurobonds include Floating Rate Notes and bond issues in all currencies. Percentages are calculated by allocating the full amount of the issue to sole lead managers and equal amounts to joint lead managers.

Table 10.7 Top 20 Underwriting Firms in the Eurobond Market as of 1982 and Their Ranks in Earlier Years

Firm	1978		1979		1980		1981		1982	
	Rank	%	Rank	%	Rank	%	Rank	%	Rank	%
Crédit Suisse First Boston	3	6.26	1	11.48	1	9.57	1	13.48	1	15.09
Deutsche Bank	1	23.31	2	8.71	2	8.56	4	5.91	2	10.44
Morgan Stanley	22	1.13	3	4.79	3	6.72	2	6.49	3	7.87
Morgan Guaranty	–	–	–	–	36	0.75	12	2.26	4	4.19
Salomon Brothers	NA	0.30	24	1.26	13	1.81	6	4.43	5	3.76
Merrill Lynch	17	1.41	30	0.88	30	0.96	5	4.68	6	3.64
Swiss Bank Corp.	29	0.82	33	0.85	22	1.46	16	2.06	7	3.63
S. G. Warburg	5	3.58	5	3.77	4	4.32	3	6.02	8	3.37
Goldman Sachs	NA	0.10	13	2.20	5	3.51	13	2.25	9	2.50
Société Générale	16	1.54	6	3.60	8	3.18	10	2.50	10	2.12
Union Bank of Switzerland	9	2.31	10	2.78	19	1.65	15	2.07	11	1.98
Dresdner Bank	4	5.55	7	3.40	7	3.26	–	–	12	1.60
Commerzbank	7	2.63	21	1.41	20	1.62	–	–	13	1.53
Nomura	12	1.92	16	1.93	24	1.19	7	2.85	14	1.53
Amsterdam-Rotterdam	16	2.76	26	1.07	16	1.74	30	0.81	15	1.49
Orion Royal Bank	14	1.63	12	2.28	11	2.22	8	2.72	16	1.42
Crédit Lyonnais	19	1.22	15	2.15	29	1.03	34	0.72	17	1.41
Citicorp	27	0.94	11	2.30	12	1.97	23	1.22	18	1.37
Manufacturers Hanover	–	–	14	2.15	–	–	25	1.01	19	1.30
West deutsche Landesbank	2	9.83	4	4.78	10	2.23	18	1.35	20	1.23

Source: Prepared by Clifford Austin Billinghurst for Morgan Guaranty Ltd., London.

Note: Eurobonds include Floating Rate Notes and bond issues in all currencies. Percentages are calculated by allocating the full amount of the issue to sole lead managers and equal amounts to joint lead managers.

Table 10.9 U.S. Concentration Ratios in the Underwriting Business, 1975–1983

	1975	1976	1977	1978	1979	1980	1981	1982
Top 1	21%	23%	24%	23%	18%	18%	18%	18%
Top 4	55	59	57	57	55	50	56	60
Top 5	63	66	64	64	63	59	64	69
Top 8	79	79	78	80	79	79	78	83
Top 10	87	85	83	86	85	84	84	88
Top 15	97	92	93	94	94	93	92	95
Top 25	100	97	99	98	98	98	97	99

Source: *Investment Dealers' Digest* annual Directories of corporate finance for 1975 to 1982. Percentage of total dollar volume of underwritings using figures giving full credit to the manager handling the books.

deals" and Rule 415 issues. The latter appear to be making the U.S. market more competitive.

Evidence from the Euromarket suggests a considerable degree of switching among management syndicates. Mendelsohn[55] notes that although a few major firms may dominate the rankings, "one does not find the same group of managers united in an offering with monotonous regularity." An analysis by *Euromoney* of two top-ranking underwriters, Crédit Suisse and Deutsche Bank, drew similar conclusions.[56]

Finally we compiled data on the number of lead managers used by issuers with three or more Eurodollar bond issues outstanding (see Table 10.10). For the sample of 107 issuers, 75% had used the services of two or more lead managers. For the

Table 10.10 Number of Lead Managers for Agencies with Three or More Eurodollar Bond Issues[a]

		Number of Lead Managers							
		1	2	3	4	5	6–10	More than 10	Total
Number of Issues	3	12	8	7	NA	NA	NA	NA	27
	4	9	3	7	2	NA	NA	NA	21
	5	5	7	1	1	0	NA	NA	14
	6–10	3	8	4	6	2	7	NA	30
	11–15	1	1	0	1	1	2	0	6
	16–20	0	1	0	0	1	1	0	3
	More than 20	0	1	0	2	0	1	2	6
	Total	30	29	19	12	4	11	2	107

Source: Based on information in *Weekly Eurobond Guide*, October 28, 1983.

Notes: [a]Reflects issues outstanding on October 28, 1983. Agencies include corporations, governmental bodies, and supranational agencies. Bond issues include straight bonds, zero coupon bonds and floating rate notes.

[b]Includes 5 banks who lead managed all of their own issues.

For all companies with three or more issues, percentage with two or more managers is 77/107 = 75%.

entire group, the average number of issues is about six and the average number of managers nearly three. This reflects both aggressive bidding for new business by underwriters and the willingness of issuers to switch lead manager affiliations.

PROBLEMS AND RISKS IN THE EUROBOND MARKET

The evidence in the two previous sections portrays the Eurobond market as a dynamic and highly competitive market. Our objective now is to describe some of the most serious criticisms concerning Eurobond market operations. Because the Eurobond market operates subject to a minimum of regulations, it is reasonable to ask whether the U.S. domestic securities market might develop similar "problems" if barriers restricting competition in securities underwriting were removed. It is important to keep in mind that the Euromarket began *de novo* only about 20 years ago, making it essential to distinguish temporary from permanent problems. We will also stress that what may be perceived as "problems" for individual firms (e.g., being forced out of the market) may simply reflect the natural operation of competitive forces that are desirable from a broader perspective.

Degree of Competition

Problems of excessive competition in the Eurobond market have been cited for the last 10 years. The alleged problem manifests itself in two ways: (1) too many houses competing for a position on tombstones and (2) mispricing caused by houses bidding too aggressively for new issues. Obviously, these are relative statements and are difficult to characterize as "problems." There may indeed be too many houses competing relative to the number that would allow existing houses to make fair underwriting profits. And new issues, priced *ex ante* with incomplete information, may appear mispriced relative to the price necessary to clear the market *ex post*, after the actual market demand has been revealed.

Regarding the first point, Mendelsohn[57] argues that "most banks are in the new issue market for prestige rather than money." With simple arithmetic, it is easily shown that underwriting returns are heavily skewed toward the managers, and the remainder of the selling group receives very little.[58] Gewirtz[59] maintains that rankings on the league table of active issuers may be important, but many houses see their presence in the Eurobond market as defensive. A house that cannot service a borrower offshore may lose the borrower's business onshore as well. Many houses are still small but expect to grow, covering current underwriting losses with secondary market trading profits.[60]

The first problem of many houses competing for business contributes to the second problem. If an oversupply of houses is vying for syndicate participations, lead managers will be encouraged to bid more aggressively for new issues. Gewirtz[61] concludes that "as long as underwriting syndicates are used to swallow mispriced deals, the problem will never go away." As long as competition does not destabilize the system, however, it is immaterial that some institutions lose money on some deals.

The excess competition problem is serious because it leads to other difficulties. Houses that accept allocations for prestige may have to dump their securities in the

gray market. Houses without placing power may be easy targets for professional buyers seeking discounts. This leads to two-tier pricing and problems of syndicate discipline, although not necessarily problems related to institutional safety and soundness.

Although shortages or surpluses sometimes arise in a particular market, when competition exists these conditions are both temporary and self-correcting. In 1977, *Euromoney* commented that although "Underwriters are given several opportunities to drop out of an issue . . . in the Euromarkets underwriters seldom drop out . . . not only because they would lose their underwriting fee, but they would lose face with the manager if they did so."[62] Less than four years later, in an article focusing on the return of realistic pricing, *Euromoney* reported that as a consequence of past losses, "banks increased the number of underwritings they refused. The refusal rate, it is thought, was running at 30% at the end of last year. This has almost certainly increased to over 50.%"[63] Continuing the trend, Engel noted "sharply reduced willingness of banks to support mispriced issues."[64] He argued that the development of a highly liquid gray market has permitted managers to observe prices firsthand. "The mechanism (of the gray market) is so effective and so anonymous that some lead managers have ended up buying virtually the whole of an issue whose price they chose to defend."[65]

Thus at present the problem of excess competition appears to have eased. Syndicate members have some scope for refusing mispriced deals, and lead managers have increased incentives for accurate pricing.

Secondary Market Liquidity

Closely related to primary market problems is the efficiency of secondary market transactions. Mendelsohn[66] indicates that the secondary market for Eurobonds used to be described "accurately, if unkindly, as consisting of a broker telephoning himself." This is still the case for some among the 3600 Eurobond issues currently outstanding.[67] Liquidity was not an essential factor in the early days of the market, when bonds were held to maturity primarily by individual investors. Now that institutional buyers dominate the market, liquidity is an important factor. Engel[68] argues that it will cost borrowers more if the manager does not have a long-term commitment to the issue in the secondary market. Lead managers generally respond that their primary responsibility is to the issuers, not to other professional market makers. They participate in market making, but capital allocated to this activity must be balanced against other considerations.[69] By some measures—volume of new issues (Table 10.1) and secondary market trading (Table 10.5)—liquidity has grown substantially. However, formal tests of transaction costs and efficiency of the Eurobond market have not been reported.

"Excessive" Spreads

Although transaction costs in the secondary market are not known, the breakdown of primary market gross spreads is widely publicized (see Table 10.6). As noted, spreads

in the Eurobond market appear high relative to the U.S. domestic market, but moderate relative to foreign markets. The origin of these costs lies in the crucial role played by the Continental banks in placing a new issue. Initially, it was essential to have the cooperation of Continental banks in order to guarantee the success of a new issue. To get the full cooperation of distributors, it was necessary to provide compensation at least equal to what they earned on domestic issues. Because sales to individuals predominated, the large selling concessions may have been justified. After large institutional buyers entered the market, the generous spread "became an anachronism," and two-tiered pricing resulted.[70]

It is difficult to judge where matters stand at the present time. Mendelsohn[71] argues that Continental banks are still the marginal sellers of an issue and therefore set the price for services, even though their role in the market is smaller than it was initially. On the other hand, Engel[72] claims that "large-scale placing at about the same price level throughout the market" is characteristic of current practice. The issue of uniform primary market pricing is important because it affects our assessment of conflicts of interest, as discussed below.

The notion of "excessive" spreads might also be interpreted to mean excessive relative to the underwriting risks incurred. We have already noted the asymmetric structure of fees earned by syndicate members. Those in the selling group earn very little, but this seems commensurate with the risks involved. A member of the selling group holds no underwriting risk; the seller need request bonds only if he has a buyer. The seller might request more bonds than he knows he can sell (1) if he wants to appear as a larger force in the market and improve his image, or (2) if the manager is likely to allot him only a fraction of his request. In either case, the seller will have unsold bonds that can be dumped anonymously in the gray market. Managers, on the other hand, bear true underwriting risk, but Mendelsohn[73] argues that the risk is "significantly small," because "issues are largely circled before the underwriting agreements are signed, and . . . in most instances the circling commitment is honored." This observation seems consistent with the less-disciplined syndicate organization and the reluctance of managers to pursue syndicate members for excess underwriting costs. If profits were more scarce and less certain, organizational arrangements would change.

Managers feel (relatively) secure with their risks because new issues are largely circled. Issuers feel secure because they can compete among lead managers for the best terms and the best services. The members of the selling group generally feel secure with their positions because allocations can be sold forward in the gray market. This leaves only the buyers to protect their interests, and these as noted, are dominated by large players.

Conflicts of Interest

Conflicts of interest in the Eurobond market do not seem to pose serious problems even in the absence of external regulation.[74] The primary conflict of interest cited in the literature is for Continental banks, which simultaneously underwrite new issues and carry responsibility for individual investment funds. It is claimed that the placing

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power of many Continental banks comes precisely from their ability to sell new issues to relatively passive clients.[73] In addition to the question of whether the Continental banks can perform unbiased investment analysis for their investment accounts, is the issue of two-tier pricing. Continental banks with a vested interest in underwriting the new issue are presumed to buy for their clients at par (retail) rather than passing along any institutional discounts, or discounts that might be apparent from gray market prices prior to the formal issue date. The investment managers under such conditions hardly perform a "best-efforts" service on behalf of their clients.

Sales of this nature, from bank underwriting department to investment clients, are not allowed under U.S. regulations. And disclosure of transactions and gray market prices would allow individuals to monitor the performance of their portfolios.

Still, if owners of individual investment accounts are being "stuffed," why don't they move their accounts elsewhere? The answer is that individual trusts receive the tremendous tax advantage of bearer bonds and no taxes withheld on interest, which more than offsets the extra 1% or 2% they may have paid on issue, and the fact that a few bonds of questionable quality may have crept into the portfolio. It is a reasonable bargain for all the participants to have struck. The real problem is the limited extent of price competition in the supply of "secrecy services"—it appears that individual account holders must sacrifice some performance to obtain secrecy.[76]

The Gray Market

The gray market, or pre-market, was originally perceived as a threat to an orderly primary Eurobond market with uniform pricing. The gray market made it easier for members of the selling group to break ranks with the syndicate and dump their allocations early—actually, to sell them today for future delivery.

In the short run, it is not clear whether the gray market helped to fragment pricing further, or simply brought the extent of weakness in any new issue under public scrutiny. Over the longer run, it is clear that the second effect has dominated. The gray market is credited with helping to increase the liquidity of the primary market. It also offers new information to syndicate managers by indicating the market's response to a new issue. It provides a useful reference point with respect to pricing. By increasing liquidity and providing information, the gray market decreases the chance for issue mispricing and increases the chance for a successful offering. The gray market could also supply a reference point for individual investors to evaluate the performance of investment managers. As such, it potentially reduces the practice of "stuffing" individual investment accounts, as noted above.

Effectiveness of the Self-Regulatory Organization

Although the Eurobond market operates with minimal government regulation, participants in the market have found it in their interest to establish a self-regulatory body. The Association of International Bond Dealers (AIBD) fills this role. AIBD was founded in 1969 under Swiss law and is based in Zürich.[77] Membership is nearly 600, and includes all the major financial institutions active in either primary or secondary markets. The Board of AIBD has created several subcommittees to study general areas of concern, such as education, settlements, market practices, and so forth. The Association holds an annual meeting each April to consider specific proposals.

Mendelsohn[78] asserts that AIBD's major role has been in secondary market trading, and that the Association's authority concerning primary market practices is not accepted. Even though most Eurobonds are exchange-listed, most secondary market trading takes place over-the-counter through market-makers recognized by AIBD.[79] In the primary market, there is no way to recognize a bona fide member of the brokerage community entitled to selling reallowance (i.e., wholesale price reduction). Consequently, price cutting in the primary market depends on individual market power.

Complaints by underwriters concerning primary market practices have been a regular theme of trade publications.[80] Smaller firms complain of being stuck with mispriced issues, and being left out when quality paper comes to the market. The larger firms point out their discipline problems, and the difficulties of stabilizing a price when small underwriters dump in the gray market. Although the Association's Primary Market Committee has discussed the mispricing of new issues and related problems, the debate has never been raised in public at an annual meeting. As noted earlier, the refusal rate among underwriters has risen, and the spread of new issue prices has converged so that, to some extent, these primary market problems have been self-correcting.

For its part, AIBD prefers to deal with technical issues—Eurobond settlements, a specialized calculator for Eurobond dealers, a standardized form for all bonds—and it appears to be fairly successful in these pursuits.[81] It has left insoluble problems (such as trying to enforce a code or realistic new issue pricing) to be worked out by the market. AIBD does not possess any statutory powers, and so it must operate on consensus. The membership recognizes the need for self-regulation (to promote investor confidence and demand), but also realizes that freedom from regulatory constraints has contributed enormously to the growth and success of the market. Given this history, it seems that AIBD will seek market solutions to problems rather than attempting to impose rules of behavior.

Distinguishing Micro Problems from Macro Problems

In 1982, 780 new Eurobond issues were launched, raising over $50 billion. Secondary market trading volume surpassed $800 billion. Given these orders of magnitude and the volatility of exchange rates and interest rates, it seems unlikely that all transactions could have been executed without problems, or that there were no frictions among competing parties. However, it is important to differentiate between problems that affect a single issue, an individual firm, or a particular time period, and problems that are life-threatening to the Eurobond market as a whole and to its constituent institutions.

Trade publications delight in describing broken deals, perhaps more so than great successes.[82] The chance of launching an issue when interest rates or exchange rates

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change suddenly, or trying an innovative issuing approach (e.g., the zero-coupon Eurobond) that suddenly loses market favor is an integral part of the underwriting risk.[83] Naturally, mistakes of this sort (and underwriting losses) occur, but the market appears to learn quickly and to respond rationally. Activity ceases and maturities shorten in response to interest rate volatility. Firms seek other innovations (e.g., Floating Rate Notes), or return to traditional straight debt, depending on demand conditions in the market.[84]

To a great extent, then, micro problems (i.e., problems of individual issues, firms, or time periods) in the Eurobond market appear to have been self-correcting without threatening its overall integrity. Operating in the absence of statutory regulation is not a license for stupidity—it is almost the contrary. Underwriters who make mistakes must either learn from experience or leave the market. Problems of excess competition and mispricing appear to have been attenuated by members of selling groups learning to refuse bad deals, and by a gray market that sends an early warning to lead managers.

Large borrowers appear to be well treated in the Eurobond market. They have shown a propensity to switch lead managers and to shop for the best deal. Large investors and institutions also have the skill to spot mispriced deals and the power to extract fair pricing. Only the "small" investor whose funds are managed by some Continental banks appears to be at a perpetual disadvantage. This problem could be reduced if investment managers were required to perform in the best interests of their clients at arm's length from the same firm's underwriting activities. Considering the tax advantages captured by these "small" investors, their "revealed preference" to incur these costs for the benefit of secrecy may in fact suit their individual needs.

SCOPE FOR INCREASING COMPETITION IN U.S. INVESTMENT BANKING

The first four sections of this chapter analyzed the operations of the Eurobond market. Competition among managers and underwriters is virtually unrestrained in the U.S. dollar and Canadian dollar segment of this market. Proposals to increase competition in U.S. investment banking would repeal the Glass-Steagall Act and permit separately capitalized securities affiliates of U.S. commercial banks to perform the full range of investment banking services for corporations and municipalities.[85] This is currently the case in most of the world's major developed countries.

Our purpose in this section is first to review the experience with combined commercial and investment banking in the rest of the world, and to draw lessons concerning conflicts of interest, operational efficiency, and related issues. We then combine these findings with our analysis of the Eurobond market to assess the chances for a favorable transplant of competitive Eurobond underwriting practices into the U.S. domestic market.

Permissible Bank Activities Worldwide

An overview of permissible banking activities across countries is presented in Table 10.11. Among these countries, only Canada and Japan have regulations similar to

Table 10.11 International Comparison of Permissible Business Activities for deposit-taking Banks

1. United States	Commercial banks are not allowed to underwrite corporate securities or municipal revenue bonds. They may underwrite U.S. Government and general obligation bonds and arrange private placements. Restrictions on interstate banking and nonbank activities.
2. Belgium	Banks may hold equity shares in connection with their underwriting activity.
3. Canada	Insurance, fiduciary, and underwriting activities are not allowed. Banks cannot own more than 10% of shares in a nonbank company.
4. France	Underwriting allowed. Deposit banks may hold up to 20% of shares in a nonbank company. Investment banks may hold up to 100% of shares in a nonbank company, only financed by deposits greater than or equal to two years maturity.
5. Germany	Universal banking, banks engage in all financial activities. Banks hold a legal monopoly on all securities brokerage activities.
6. Hong Kong	Underwriting allowed. Banks cannot hold more than 25% of their capital in nonbank company shares.
7. Italy	Underwriting allowed. Banks cannot hold more than 2% of their capital in nonbank company shares.
8. Japan	American pattern. Underwriting prohibited except for public sector bonds and by bank overseas subsidiaries.
9. Luxembourg	No statutory restrictions.
10. Netherlands	Underwriting allowed. No direct restrictions on bank activities. Equity participations greater than 5% are subject to approval.
11. Singapore	No separation of commercial and investment banking. Banks cannot hold more than 25% of their capital in nonbank company shares.
12. Switzerland	Universal banking. No formal restrictions on banks.
13. United Kingdom	No specific controls. All activities allowed subject to capital adequacy constraints. By tradition, a separation between deposit-taking banks (i.e., accepting houses) and merchant banks (i.e. issuing houses).

Source: Richard Dale, "Bank Supervision Around the World." New York: Group of 30, 1982.

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the United States, which prohibit the combination of commercial banking and investment banking activities. Dale[86] notes that in Japan the U.S.-style separation of commercial and investment banking "is regarded as an historical accident rather than a prudential necessity." Table 10.11 suggests that banks outside the United States have the right to engage in a wider range of activities, including life insurance, equity participations in nonbanking firms, and security market transactions. An extreme example is in Germany, where the banking act grants a monopoly for all securities brokerage business to banks.[87]

The relationship between the nature of the banking system and the degree of competition or macroeconomic control is complex. Japan emulates the U.S. style of separation between commercial and investment banking, yet official guidance is used heavily to effect interest rates and credit allocation.[88] European countries, on the other hand, allow banks to compete with each other and to offer the widest possible variety of financial services. Yet, as Table 10.12 illustrates, the concentration of commercial banking activities is much higher in Europe than in the United States.[89]

Factors in the United States Favoring a Successful Adaptation of Competitive Eurobond Practices

We now turn to consider those factors in the U.S. economy that would either complement the positive features of the Eurobond market or offset the negative features described earlier. For the sake of this exercise, we assume that concentration (and returns) in the U.S. investment banking industry are currently high relative to a fully competitive industry (see Chapter 5). Regulation has prohibited one natural group of competitors (commercial banks) from entering the market. High economic costs have restricted new competition from the United States and abroad from entering the market and reducing concentration.

The Eurobond market is close to a textbook example of a purely competitive market.[90] As such, it is not difficult to enumerate the key features that contributed to the growth and stability of that market:[91]

1. Financial expertise: Skilled people to establish realistic offering prices, adjust for changing market conditions, innovate new products, and contain risks.
2. Techniques for risk management: Formation of large syndicates, well-known issuers, forward sales in the gray market, yield pricing.
3. Marketing expertise: Knowledge of borrower and investor preferences concerning issue costs, information disclosure, tax benefits, and so forth; access to an effective distribution system.
4. Communications technology: Reuters monitor; Euro-clear and Cedel for clearing transactions.
5. Liquid secondary markets: To promote primary market demand.
6. Financial capital: To absorb temporary losses.

We assert without formal proof that these features of the Eurobond market are also characteristic of U.S. financial markets and U.S. commercial banks. By analogy, if

Table 10.12 International Comparison of Market Shares of Major Banks, 1979

		Percentage of Liabilities of:		
		Commercial Banks	Deposit-taking Institutions	All Financial Institutions
Germany	big three banks[a]	51	13	11
France	big three banks	61	25	18
Italy	big five banks	43	23	19
Netherlands	big three banks[a]	80	35	15
Switzerland	big three banks	77	32	17
Sweden	big four banks	87	51	24
Japan	12 city banks	61	30	21
USA	176 money-center banks	43	27	15
UK	London clearing banks[a]	68	38	20

Source: "Wilson Report". Sir Harold Wilson, Chairman of the Committee to Review the Functioning of Financial Institutions, London: Her Majesty's Stationery Office, June 1980.

[a]Based on group figures.
The banks included are as follows:
Germany: Deutsche Bank, Dresdner Bank, Commerzbank
France: Banque Nationale de Paris, Credit Lyonnais, Societe Generale
Italy: Banca Nazionale del Lavoro, Banca Commerciale Italiana, Credito Italiano, Banco di Roma, Banco di Napoli
Netherlands: Algemene Bank Nederland, Amsterdam-Rotterdam Bank, Nederlandsche Middenstandsbank
Switzerland: Swiss Bank Corporation, Union Bank of Switzerland, Swiss Credit Bank
Sweden: PK Banken, Svenska Handelsbanken, Skandinaviska Enskilda Banken, Gotabanken

U.S. investment banking activities were left open to free competition, the level of financial expertise, risk management skills, and communications technology is such to encourage a stable supply of investment banking services at competitive rates.

Our review also noted several negative factors about the Eurobond market and the operation of commercial bank affiliates in that market. Might similar negative features also become part of a U.S. banking system if free competition in corporate financial services were permitted?

1. *Conflict of Interest.* One potential conflict involves Continental banks and their roles as part of the underwriting group and as managers of investment funds. The suggestion in the literature is that excess underwriting fees or unrealistic prices have been passed along to unsuspecting, usually passive trust accounts. In contrast, "self-dealing" is now prohibited under U.S. regulations and applies to subsidiaries as well as affiliates.[92]

Another conflict arises between banks and corporate borrowers. European practice of combined commercial and investment banking has been associated with relatively close and exclusive ties between banks and nonfinancial corporations. One fear is that the banks might refuse to provide certain commercial banking services (e.g.,

loans, lines of credit, foreign exchange) to a corporation unless the bank also provides investment banking services. In the United States, such "tie-in" sales are in restraint of competition and prohibited by the Sherman Act.[95] A related fear is that closer bank/corporate ties might reduce the bank's ability to prepare unbiased loan appraisals or increase the chances for unsound lending. This abuse is a theoretical possibility but rather remote, given that imprudent lending could be detected by astute bank examiners and subject the bank and its management to regulatory sanctions and civil liability.[96]

2. *Concentration in Banking.* The data suggest that banking concentration is substantially higher abroad than in the United States. Japan, however, which does have a U.S.-style separation of commercial and investment banking, also shows higher concentration. The United States currently has more than 14,000 commercial banks. Even if interstate banking is permitted and a wave of mergers follows, the Sherman Act could be used to preclude anticompetitive mergers in either commercial or investment banking activities.

3. *Macroeconomic Regulation.* We have pointed out that macroeconomic regulation in countries with combined commercial and investment banking often takes shape through controls on the amount and distribution of credit. These measures would be contrary to a free market for credit. We have argued that these macroeconomic policies are more characteristic of small, open economies with a tradition of strong central direction. It is highly unlikely that the United States would tend toward more centralized control over credit, even if it were easier to implement under a more integrated banking system.

Factors Favoring a Less-Successful Adaptation and/or Small Gains from Competitive Eurobond Practices

Markets may establish efficient pricing through competition from either the supply or the demand side. Traditionally, one thinks of competition among suppliers to provide services at the lowest possible prices to capture market share. The result is that all buyers, even those who are completely uninformed about the market, pay the same fair price for services. On the other hand, one can imagine competition from the demand side to pressure a group of oligopolistic suppliers. Well-informed buyers, who know the fair price for services, may withhold demand, seek close substitutes (bank loans, commercial paper, auction issues), and otherwise pressure suppliers to offer services at a fair price. Eventually, virtually any cartel will break and fair prices will result.

In the U.S. investment banking industry, the statistics on concentration do not reveal much variation. If anything, concentration has tended to increase in the 1970s. However, Hayes et al.[97] conclude that the concentration data are deceptive because the market is actually composed of distinct segments "within which substantial competition takes place but between which competition may be less robust."

On the demand side, market observers describe a kind of "in-house" competition that has developed in the last 20 years.[98] Historically, corporate financial officers relied heavily on their investment bankers for expertise. Over the years, the quality

of financial staff resources of major U.S. corporations has improved substantially. Consequently, firms are more capable of distinguishing the value of alternative investment banking services, and to judge which are cost-effective. In some cases, clients have turned to alternatives that avoid the use of investment banking services altogether.[97] SEC Rule 415 on shelf registration should allow corporations additional time to shop for the best deal.

Large corporations can also turn to the Eurobond market for active competition if they feel that the domestic market conditions are not sufficiently competitive, as U.S. corporations are increasingly prepared to do.[98] The initial attraction is the lower cost of offshore funding, but corporations often enjoy secondary benefits in having their underwriting business sought by more competitors. Unfortunately, the Eurobond market alternative is available primarily to larger firms.[99]

There is reason to believe that the larger, well-informed U.S. corporations have already inspired a highly competitive atmosphere in U.S. investment banking. By actively comparing Eurobond and U.S. domestic bond issues, U.S. corporations may be "arbitraging" these differences and forcing the price of U.S. investment banking services to competitive levels. It is not clear whether small corporations, without access to the Eurobond market, also receive competitive prices for securities underwriting services. Accepting this argument, efficiency gains from allowing further competition in U.S. investment banking would be relatively small.

SUMMARY AND CONCLUSIONS

At the beginning of this chapter, we observed that the market for investment banking services in the United States is not freely competitive because the Glass-Stegall Act excludes one major group of competitors (securities affiliates of commercial banks) from the market. As a result, agents that provide both commercial and investment banking services have been severely constrained in the United States. The Eurobond market offers an opportunity to examine the operation of a market in which there are few official regulations and no restrictions on who may provide securities underwriting services. The behavior of foreign banks which combine commercial and investment banking was analyzed through their operations in the Eurobond market and in their onshore activities.

Data on the Eurobond market were presented to describe the dimensions and competitive efficiency of the market. By all standard measures—new issue volume, secondary market volume, default rate on bonds, underwriting concentration ratios—the Eurobond market must be labeled a success. Without official guidance or subsidy, it has grown to a size essentially equal to the U.S. domestic bond market. Adaptation and innovation—syndicate organization, the gray market, automated clearing, and so forth—have accompanied growth. To some extent, individual underwriting successes may have been the result of exogenous events (e.g., exchange rate changes that affected the supply of DM bonds always led by German banks) or the beneficial impact that financial secrecy may have on placing power (in the case of Swiss banks). Overall, however, competitive conditions appear to have stabilized the market, with

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the availability and terms for funds responsive to market conditions and the more efficient and innovative firms (including affiliates of U.S. commercial banks), capturing market share. Firms in the market have behaved prudently and did not use the absence of regulation as an opportunity for taking excessive risks.

In our review of European banking practices a number of areas for concern were highlighted, including conflict of interest between investment management and underwriting activities, excessive linkages between banks and corporations, and concentration in banking activities. We pointed out that U.S. regulations pertaining to disclosure, fiduciary responsibility, anticompetitive practices and the like would prevent similar developments in the U.S. market. The tendency for official guidance in many foreign credit markets, we argued, has little relationship to the combined commercial and investment banking in these countries.

The chapter has documented one case in which a largely unregulated financial market produced very favorable results. Existing U.S. regulations seem capable of dealing with known abuses and points of concern about the linkage of commercial and investment banking activities. The decision to abolish Glass-Steagall restrictions could be framed in terms of cost/benefit analysis. The costs are the increased risk to the banking system via bank/corporation, bank/trustee, and bank/depositor relations. From the Eurobond market experience, the risks appear small and manageable. The benefits result from increased competition in the supply of investment banking services. Given the power of large corporations and their access to a competitive Euromarket, the benefits of increased competition may be small for this group. However, allowing increased domestic competition would make these benefits more certain and expand their availability to all firms.

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NOTES

[1]The distinction between the Eurobond market and foreign securities markets is discussed in the following section.

[2]Most OECD countries do not formally separate commercial and investment banking and, as we will describe, some countries permit banks to engage in essentially any activity (i.e., universal or multipurpose banking) including substantial equity positions in nonfinancial companies. The few exceptions—the United States, Canada, Japan, and perhaps the United Kingdom, where precedent separates commercial and investment banking—comprise the three largest financial markets in the world. In the United Kingdom, however, three of the "Big Four" clearing banks own investment banks, and two of these are fairly important. See Richard Dale, *Bank Supervision Around the World*. (New York: Group of Thirty, 1982).

[3]In some sense, the second question probes into the macroeconomic costs and benefits associated with eliminating the separation of commercial and investment banking. Our research design might propose to compare the macroeconomic performance of industrial countries in which commercial banking and investment banking are formally separated with those in which the activities are combined. Macroeconomic performance varies considerably across countries, and undoubtedly regulations affecting the financial sector and the institutional structure of banking play a role. However, macroeconomic performance is a function of many variables and without a highly detailed model it is impossible to determine how great that role is.

[4]M. S. Mendelsohn, "The Eurobond and Foreign Bond Markets," Section 5.1 in A. George and I. Giddy (eds.), *International Finance Handbook*. (New York: Wiley, 1983), makes the argument that the thrust of regulation in the United States is disclosure, whereas in Europe, regulation is directed toward resource allocation, national planning, and monetary control. Consequently, U.S. authorities for the most part impose no restrictions on issue volume as long as the appropriate disclosure is made. European authorities frequently establish a queue for new issues which is managed to prevent market "congestion" or to achieve interest rate or exchange rate targets. One could argue that these regulatory objectives play the dominant role in European capital markets rather than the coincidence of commercial and investment banking. For more on the regulation of security markets in Europe, see Wymeersch (Eddy Wymeersch, "Securities Markets Regulations in Europe," Section 6.2 in A. George and I. Giddy (eds.), *International Finance Handbook*. (New York: John Wiley, 1983).

[5]Throughout this chapter we assume that existing U.S. regulations concerning information disclosure, anticompetitive behavior and anticompetitive mergers would apply, even if the Glass-Steagall act were abolished.

[6]Although it would be interesting to document the innovations in the Eurobond market made by U.S. commercial bank affiliates, it is beyond the scope of this chapter to do so. Our purpose is to shed light on the behavior and characteristics of an unregulated financial market rather than specific individuals within that market.

[7]If existing restrictions on interstate branching were maintained, the ability of securities affiliates of U.S. commercial banks to place securities across state lines might be questioned. For our analysis, we assume that such restrictions would not apply to securities affiliates and that they would be permitted to compete on equal terms with existing investment banking houses.

[8]M. S. Mendelsohn, *Money on the Move*. (New York: McGraw-Hill, 1980), p. 137.

[9]Coussement ("When the Bonds Went Round Luxembourg in a Van," *Euromoney* [February 1981], pp. 81–83.) states that the first Eurobond issue was in 1961 for the Portuguese oil company SACOR in the amount of 5 million European Units of Account.

[10]*World Financial Markets*, Morgan Guaranty Trust Company, New York (November 1983). Total volume in the first 10 months of 1983 was down 7% from 1982. See Carl Gewirtz, "Declines in Eurobond Activity Tied to Drop in Dollar Issues," *International Herald Tribune* (November 29, 1983a), p. 9.

[11]See *Ibid.*, and *Weekly Eurobond Guide*, Datastream International Limited, London, various issues.

[12]These are gross new issues, without netting out security redemptions. See *Financial Statistics Monthly*, OECD (November 1983), p. 14.

[13]M. S. Mendelsohn, "The Eurobond and Foreign Bond Markets," Section 5.1 in A. George and I. Giddy (eds.), *International Finance Handbook*. (New York: Wiley, 1983), pp. 4–5.

[14]Mendelsohn, "The Eurobond Market," p. 10.

[15]After January 1, 1983, new federal regulations required U.S. citizens to hold Eurobonds in registered form. U.S. investors had to elect registered form as an option, even though the bulk of Eurobond issues remained in bearer form. See H. Read, "The Secondary Market Wrestles with TEFRA," for further details.

[16]M. S. Mendelsohn, "The Eurobond and Foreign Bond Markets," Section 5.1 in A. George and I. Giddy (eds.), *International Finance Handbook*. (New York: Wiley, 1983), p. 10; and Daniel Magraw, "Legal Aspects of International Bonds," Section 5.3 in A. George and I. Giddy (eds.), *International Finance Handbook*. (New York: Wiley, 1983), p. 3.

[17]Frederick G. Fisher, *International Bonds*. (London: Euromoney Publications, 1981), p. 95; and Mendelsohn, "Eurobond Markets," 1983, p. 7.

[11]In the United Kingdom, the Bank of England controls the queue; in West Germany the Federal Department of Commerce is in charge of domestic issues. In France, new issues must be cleared with the Treasury. And in Switzerland there is an official Issues Committee. See James E. Maycock, "United Kingdom: Banking, Money and Bond Markets," Section 4.3 in A. George and I. Giddy (eds.), *International Finance Handbook*. (New York: Wiley, 1983), p. 5; Gunter Dufey, and Krishnan, E., "West Germany: Banking, Money and Bond Markets," Section 4.4 in A. George and I. Giddy (eds.), *International Finance Handbook*. (New York: Wiley, 1983), p. 14; Florin Aftalion, and Bompaire, Frederick, "France: Banking, Money and Bond Markets," Section 4.5 in A. George and I. Giddy (eds.), *International Finance Handbook*. (New York: Wiley), 1983, p. 3; and Mario A. Corti, "Switzerland: Banking, Money and Bond Markets," Section 4.6 in A. George and I. Giddy (eds.), *International Finance Handbook*. (New York: Wiley, 1983).

[12]Antonie W. Van Agtmael, ("Issuance of Eurobonds: Syndication and Underwriting Techniques and Costs," Section 5.2 in A. George I. Giddy (eds.), *International Finance Handbook*. (New York: Wiley, 1983), p. 5) notes, we believe incorrectly, that no queuing exists in the Eurobond market. Compare Fisher, *International Bonds*, p. 20.

[13]See Mendelsohn, "Eurobond Markets," 1983 p. 10; Dufey and Krishnan, "West Germany," 1983, p. 15; Corti, "Switzerland," p. 3; and Eddy Wymeersch, "Securities Markets Regulations in Europe," Section 6.2 in A. George and I. Giddy (eds.), *International Finance Handbook*. (New York: Wiley), 1983.

[14]M. S. Mendelsohn, *Money on the Move*. (New York: McGraw-Hill, 1980), p. 139.

[15]A bought deal is a preunderwritten issue, offered to a borrower on a take-it-or-leave-it basis, which is valid for a specified short time period. Bought deals have been offered and closed out within 24 hours. See Fisher, *International Bonds*, p. 83; and David Shirreff, "The Warrior Style of CSFB's Rudloff," *Euromoney*, (December 1981), pp. 24–32, p. 31.

[16]For the view that Eurobond selling concessions are relatively high, see Fisher, *International Bonds*, p. 81, Mendelsohn, (*Money on the Move*, 1980, p. 184) and Mendelsohn "Eurobond Markets," 1983, pp. 13–19).

[17]The differential has reached 100 basis points or higher for some issuers. See Richard Karp, "How U.S. Companies Are Catching the Eurobond Habit," *Institutional Investor* (August 1982), pp. 127–135, and Mendelsohn ("Eurobond Markets," 1983).

[18]Mendelsohn (*Money on the Move*, 1980, p. 136) citing World Bank records.

[19]Fisher, *International Bonds*, p. 19.

[20]Mendelsohn, "Eurobond Markets," 1983, p. 5.

[21]*Ibid.*

[22]Fisher, *International Bonds* 1981, p. 19.

[23]Fisher, *International Bonds*, p. 19.

[24]Mendelsohn, "Eurobond Markets," 1983, p. 15. The purchase is made by the lead manager as agent for the underwriting syndicate in order to avoid double taxation.

[25]Fisher, *International Bonds*, p. 77, notes that underwriters are rarely mailed copies of the subscription agreement prior to closing, and so they must have trust in the management group. See also Mendelsohn, "Eurobond Markets," p. 16.

[26]Mendelsohn, *Money on the Move*, p. 183.

[27]Fisher, *International Bonds*, p. 80.

[28]This is the general view expressed by Fisher (1981, p. 80). In the Deutsche mark segment of the market, the major German issuing banks monitor early trading closely to identify banks that break ranks. (See Tim Anderson, "Germany's Exclusive Club," *Euromoney* [May 1983b], pp. 50–52.)

[29]Gray market prices first appeared on the Reuters Monitor in August 1982, although telephone prices were circulated earlier. (Tim Anderson, "Clearing the Grey Clouds," *Euromoney* [May 1983a], pp. 26–28, and private interviews.)

[30]See, for example, *AGEFI International Finance Review*, London: AGEFI Press Limited.

[31]Large institutions buying for trust accounts need not pass along these gains, a problem we explore in the section on "Problems and Risks in the Eurobond Market."

[32]In the Eurobond market, there is no rule compelling sellers to charge the same price to all buyers as there is in the U.S. market. See Mendelsohn, "Eurobond Markets," p. 16.

[33]Fisher, *International Bonds*, p. 38, notes that estimated ratings based on comparison with similar domestic securities are often reported.

[34]*Ibid.*, p. 60.

[35]*Ibid.*, p. 81.

[36]See Shirreff, "Warrior Style," 1984.

[37]See Fisher, *International Bonds*, pp. 83–86, and Fisher, "Imagination Wins Again," *Euromoney* (February 1981), pp. 125–128, for details.

[38]In 1980, the principal amount of dollar Floating Rate Notes totaled $4.0 billion or 31.5% of all Eurodollar issues, up from $1.1 billion and 12.7% in 1976. See Fisher, *International Bonds*, p. 103.

[39]At the end of 1980, Euro-clear had 123 shareholders and serviced 1080 member banks. Cedel had 94 shareholders with 1050 member banks. (Ibid., p. 182).

[40]Tim Anderson, "The Growing War Between Cedel and Euroclear," *Euromoney* (February 1981b), p. 35.

[41]Fisher, *International Bonds*, p. 182.

[42]Mendelsohn (*Money on the Move*, p. 61) displays a deep reverence for the Eurobond market exclaiming, "It saved the industrialized world from an even deeper recession (in the 1970s) than it actually suffered and allowed many industrial countries to maintain an almost unchecked economic expansion."

[43]Ibid., p. 47.

[44]M. S. Mendelsohn, *Money on the Move*. (New York: McGraw-Hill, 1980), p. 50.

[45]Mendelsohn ("Eurobond Markets," 1983, p. 11) cites Fisher *The Eurodollar Bond Market*, 1979) claiming that by mid-1976 there had been 19 defaults totaling more than $300 million. Moreover, a 1984 case alleges that a trader from Bear, Sicurro (New York) and another from Union Bank of Switzerland engaged in fraudulent trading, defrauding both companies of $8.3 million. The case raises the issue of whether the incident reflects an isolated case resulting from poor internal controls, or whether the market's general lack of regulation is at fault. The resolution of this dispute, with its third-party implications, is an important challenge for the Association of International Bond Dealers's arbitration procedures. See "Bear-Faced Fraud," *The Economist*, July 14, 1984, pp. 72–73.

[46]M. S. Mendelsohn, *Money on the Move*. (New York: McGraw-Hill, 1980), p. 194.

[47]Samuel L. Hayes, A. Michael Spence and David Marks, *Competition in the Investment Banking Industry*, p. 55.

[48]M. S. Mendelsohn, "The Eurobond Markets," p. 12.

[49]See "Are the Eurobond Markets Incestuous?" *Euromoney* (November 1977), pp. 46–47.

[50]M. S. Mendelsohn, *Money on the Move*. (New York: McGraw-Hill, 1980), p. 185.

[51]Mendelsohn (*Money on the Move*, pp. 185–190) shows that in a typical Eurobond underwriting ($45 million for nine years with spread totaling 2.5%), the lead manager and co-managers (if any) will claim half of the fees. The underwriting group (about 90) would share about 38% of the fees, and the selling group (perhaps 100) would share about 12% of the fees. Mendelsohn draws the conclusion that most members of the syndicate do not expect profits from their activity. This, of course, presupposes that the entire issue is sold at the offering price—that is, that the full 2½% is earned—which may well not be true.

[52]Carl Gewirtz, "Decline in Eurobond Activity Linked to Drop in Dollar Issues," *International Herald Tribune*, November 29, 1983b.

[53]Peter Koenig, "Why Trading Is Fun Again," *Institutional Investor* (May 1983b), p. 174.

[54]Gewirtz, "Decline in Eurobond Activity," 1983b.

[55]"How the Citicorp issue Rocked the Euromarkets," *Euromoney*, (November 1977), p. 14.

[56]Tim Anderson, "Optimism Shyly Creeps Back to th... ...d Markets," *Euromoney* (May 1981c), p. 46.

[57]Gerald Engel, "Underwriters Need to Know Where They Stand," *Euromoney* (May 1983), p. 24.

[58]*Ibid.*

[59]M. S. Mendelsohn, *Money on the Move*. (New York: McGraw-Hill, 1980), p. 195.

[67]Koenig, "Trading is Fun Again," May 1983b, p. 172.

[68]Gerard Engel, "Underwriters Need to Know Where They Stand," p. 24.

[69]Koenig, "The Great Liquidity Debate," pp. 158–159.

[70]Mendelsohn, "Eurobond Markets," 1983, p. 14.

[71]M.S. Mendelsohn, "The Eurobond Markets," (1983), p. 16.

[72]Gerard Engel, "Underwriters Need to Know Where They Stand," (1983), p. 24.

[73]M.S. Mendelsohn, "The Eurobond Markets," (1983), p. 15.

[74]In any market setting, one expects to observe agents taking steps to protect their interests—sellers limit their product claims, buyers search out product information, and so forth. As we have noted, participants in the Eurobond market have similarly developed effective mechanisms to protect themselves from loss.

[75]Mendelsohn, *Money on the Move*, 1980, p. 174; and Mendelsohn, "Eurobond Markets," 1983, p. 21.

[76]For more on secrecy in banking, see Ingo Walter, "Global Players in the Financial Secrecy Game," *NYU Bulletins*, 3, No. 2 (Fall 1983/Winter 1984), pp. 10–17, and Ingo Walter, *Secret Money* (London: George Allen & Unwin, 1985).

[77]Fisher, *International Bonds*, pp. 183–184.

[78]M. S. Mendelsohn, "The Eurobond Markets," p. 14.

[79]Mendelsohn, *Money on the Move*, 1980, p. 195. See the *Weekly Eurobond Guide* for a listing of AIBD secondary market makers.

[80]See for example, Tim Anderson, "Hambro, Hamburg and the Social Club," *Euromoney* (May 1981a), pp. 31–33; and Tim Anderson, "Optimism Shyly Creeps Back to the Bond Market," *Euromoney* (May 1981c), pp. 45–48.

[81]See Anderson, "Hambro, Hamburg and the Social Club," 1981a, p. 33. However, concerning recently alleged fraudulent trading (see footnote 52), *The Economist* (July 14, 1984, p. 72) has commented that "Self-regulation in such a market relies heavily on the probity and vigilance of its members, but when they fail a strong watchdog is needed. The AIBD is neither strong nor a watchdog."

[82]See for example, Sherrell and Martin, "Milestone Deals," *Euromoney* (Oct. 1981), pp. 269–275.

[83]See Karp, "U.S. Companies," 1982, pp. 134–135 for a discussion of how several major underwriting firms were caught in May 1982 when expectations of a lower U.S. budget deficit led them to believe that interest rates would drop.

[84]Floating Rate Notes in the Euromarket have proved to be a major success. Money managers have been drawn to these instruments because of yield (typically the six-month LIBOR rate + ⅛%) and liquidity has improved so that the bid-ask spread is only 5 basis points (compared to 25 basis points on the most active fixed-coupon Eurobond). See Gewirtz, "Eurobonds," 1983a. During 1983, the overwhelming percentage of Eurodollar bonds were reported to be classic straight issues, without sweeteners of any sort. See Gewirtz, "Decline in Eurobond Activity," 1983b.

[85]*Universal banking* is the term generally used, but may be a poor choice because some readers will associate it primarily with German banks which are allowed to perform almost any financial service. For the moment, we ignore the important distinction as to whether the commercial and investment banking activities take place in legally separate subsidiaries of a bank holding company or simply in separate departments of a single bank.

[86]Richard Dale, *Bank Supervision Around the World*. (New York: Group of 30, 1982), p. 42.

[87]Wymeersch, "Securities Markets," 1983, p. 45.

[88]The extent of official guidance has been relaxed recently. See Deborah L. Allen, "Japan: Banking, Money, and Bond Markets," Section 4.7 in A. George and I. Giddy (eds.), *International Finance Handbook*, New York: Wiley, 1983. Mario A. Corti, "Switzerland: Banking, Money and Bond Markets," Section 4.6 in A. George and I. Giddy (eds.), *International Finance Handbook*. (New York: Wiley, 1983) and Eisuke Sakakibara, "The Japanese Financial System in Transition," in T. Agmon, R. Hawkins and R. Levich (eds.), *The Future of the International Monetary System*. (Lexington, Mass.: D.C. Heath, 1984).

[89]Concentration in the United States may be artificially low because of the ban on interstate banking. But note also that the concentration ratios in Europe represent three to five banks.

[90]The U.S. and Canadian dollar segments of the market are least subject to governmental regulations. See the discussion in the second section.

[91]The U.S. OFDI controls in the 1960s were a key feature that led to the Eurobond market, whereas the IET diverted foreign borrowers from the U.S. as well. However, because entry into the Eurobond market was never restricted, we expect to see the elimination of any excess profits that might have arisen from these distortions.

[92]See Chapter 8 on the conflict of interest question.

[93]See Chapter 5.

[94]This point is developed further in Chapter 7.

[95]Samuel L. Hayes, "The Transformation of Investment Banking," *Harvard Business Review*, January/February 1979, p. 170.

[96]This term is used by Samuel L. Hayes Spence, A. Michael, and Marks, David Van Praag. *Competition in the Investment Banking Industry*. (Cambridge, Mass.: Harvard University Press, 1983).

[97]Hayes, ibid., p. 156 cites the Exxon "Dutch auctions," corporate dividend reinvestment plans and stock-for-stock corporate mergers as three examples.

[98]It appears that large U.S. corporations are monitoring very closely both U.S. and Eurobond market conditions. Exxon devised an issue which it was prepared to launch in either market. See Karp, "U.S. Companies," 1982, p. 135.

[99]On February 1, 1984, the Alaska Housing Finance Corporation became the first U.S. State agency to offer securities to the Euromarket. To complete the $100 million, 10-year issue, the agency was required to establish an overseas financing corporation in the Netherlands Antilles. See "Alaska to Offer First Eurobonds," *International Herald Tribune*, January 11, 1984.

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The CHAIRMAN. Thank you very much, Professor Levich.
Mr. Mendoza, go ahead, please.

STATEMENT OF ROBERTO G. MENDOZA, JR., EXECUTIVE VICE PRESIDENT, MORGAN GUARANTY CO., NEW YORK, NY

Mr. MENDOZA. Perhaps I should start by saying that I agree with every word that Professor Levich said.

I appreciate the opportunity to appear before you today to discuss the internationalization of financial activities and the impact of the Glass-Steagall Act on the competitiveness of American capital markets and financial institutions.

INTERNATIONAL IMPLICATIONS OF GLASS-STEAGALL

I will limit my remarks to the international implications of the Glass-Steagall Act, but at the same time I would hasten to add that the Glass-Steagall Act seriously impedes the ability of U.S. commercial banks to adapt to profound changes taking place in our own domestic markets.

We at Morgan believe that it is important not only for us but also for the interests of the United States that American financial firms and American capital markets be competitive on a global scale. Given the interdependence of financial and political forces, the strength and influence of the Nation's financial firms is a matter of considerable national interest.

American capital markets must be competitive and efficient in order to achieve optimal levels of capital formation in this country. In addition, as the United States strives to redress its international trade deficit, it will need to look in greater part to the services sector. Strong, competitive capital markets in this country can make a significant contribution to our ability to export financial services.

We can no longer take it for granted, however, that American firms will continue to be major competitors in world markets or that American capital markets will keep pace with markets located abroad. The signs that we see indicate otherwise.

In the first place, American financial firms are no longer the undisputed leaders in the international capital markets. And I am not going to use a size criterion. While in 1982, 6 of the top 20 Eurobond underwriters and three of the top five were American firms, measured by underwriting volume, today only 4 of the top 20 are American and none of these is in the top 5. By way of contrast, 3 of the top 5 and 7 of the top 20 are Japanese.

In addition, it is worth noting that many of the leading American securities firms, as they seek the capital and overseas know-how that they need to compete on a worldwide basis, have had to turn to foreign investors.

To give you one example, a nearly 40 percent interest in First Boston, one of the leading American securities firms, is owned by an affiliate of Credit Suisse, a major foreign commercial bank that does a full-scale commercial banking business in the United States. There are numerous other examples. We believe this will continue to happen, and while we have no desire to curtail the ability of American securities firms to raise capital and form such alliances

with foreign firms—and in fact, we support their ability to do so—we question the wisdom of excluding well-capitalized American organizations from participating in the U.S. securities business on an equal basis.

There is also ample evidence that foreign capital markets and, in particular, the London-based Euromarkets, are growing faster than and at the expense of U.S. markets. The Eurobond market grew by 800 percent from 1980 through 1986, nearly half again as fast as the U.S. corporate bond market.

American corporations are increasingly going to the Euromarkets to issue their bonds while at the same time foreign issuers also increasingly prefer the Euromarkets.

As this evidence indicates, we cannot be complacent about the competitive position of our financial markets. We believe that one of the primary reasons, but not the only one, for these unfortunate developments is the anticompetitive effects of the Glass-Steagall Act. Not only does the Glass-Steagall Act preclude full and open competition among financial services firms in the United States, but it also significantly constrains their ability to compete in capital markets abroad. This is due to the global nature of corporate finance today. Businesses seeking to raise funds are no longer locked into their own home markets. Modern technology, the development of new types of financial transactions, and the growing sophistication of the markets allow businesses to raise funds wherever they are cheapest regardless of currency or the location of the market.

Let me give you some examples. A typical U.S. industrial company that wishes to raise medium-term funds in dollars at a fixed rate to finance its capital expenditure program enjoys a number of alternatives today which were not available in the past.

In addition to the options of floating a dollar issue in the domestic or Eurobond fixed-rate markets, it can also do a fixed or floating rate issue in a broad range of foreign currencies—yen, German marks, Swiss francs, sterling, French francs, and even composite or synthetic currencies such as the ECU. It would then swap the proceeds into fixed-rate dollars for the desired term.

Obviously, a borrower would choose the option that carries the lowest cost. Those firms that have the ability to operate in all markets, the capital strength to execute a swap, and the corporate finance skills to create the optimal borrowing structure possess an overwhelming advantage in competing for the business of such borrowers against firms such as U.S. commercial banks which lack one of these three attributes.

The Glass-Steagall Act precludes all United States and most foreign commercial banks from underwriting securities in the U.S. debt and equity markets. This restriction weakens American commercial banks and diminishes the vitality of our markets relative to those foreign markets where similar inhibitions do not exist.

The impact of the Glass-Steagall restrictions on U.S. commercial banks' foreign activities is perhaps most apparent in the equity underwriting area. A significant proportion of the equity issues floated by American corporations in the U.S. market involve a simultaneous offering abroad. As a practical matter, these offerings, which nominally incorporate domestic and Euro branches, actually repre-

sent a single, integrated offering, one for which U.S. commercial banks cannot compete.

FOREIGN BANKS HAVE A COMPETITIVE ADVANTAGE

I should note here that we find it indeed strange that the United States permits some of our major competitors, the 15 foreign banks referred to by the chairman, grandfathered under the International Banking Act of 1978, to engage in both commercial banking and full underwriting activities in this country.

These organizations have a true competitive advantage, and they are more than an interesting anomaly. In the last half of 1986 the affiliates of six of these banks were members of syndicates which underwrote over $20 billion of debt and $4.2 billion of equity in the U.S. markets.

One such organization, First Boston—Credit Suisse First Boston, as it advertises itself—underwrote more taxable, fixed-income, and equity securities worldwide than any other firm in 1986, a dramatic illustration of the benefits that can be gained by integrating the commercial and investment banking functions.

At the same time that we allow these foreign firms to engage in a full range of financial activities in this country, we limit the competitive abilities of American firms both at home and abroad.

U.S. commercial banking organizations are uniquely qualified to compete in markets around the world. As Professor Sam Hayes, of the Harvard Business School, has observed in a recent book, the Glass-Steagall Act excludes "the best-positioned potential competitive entrants."

American commercial banks have the necessary combination of capital and skills. All that they lack is the ability to utilize these attributes in the U.S. markets.

The Glass-Steagall Act also is a major factor in limiting the amount of activity that takes place in U.S. capital markets. Except for the grandfathered foreign banks, the act bars both domestic banks and foreign banks doing business in the United States from full participation in underwriting activities in our markets.

As a result, American markets are not as competitive as they otherwise might be. In fact, it has been widely documented that U.S. securities markets are highly concentrated.

The value of competition to the development and growth of markets has been recognized by foreign market regulators. The big bang in Great Britain, the recent reform of financial regulations in Canada, and the various steps being taken in France have all been undertaken with one thought in mind: to improve the competitive position of the markets in each of those countries.

In this connection, however, we should be mindful of another point. We cannot expect that those countries that have opened their securities markets to our commercial banks would extend their welcome indefinitely if we do not institute reforms that allow their firms to participate to the same extent in our markets.

Even Japan, which has its own version of the Glass-Steagall Act, Article 65, has taken steps to enhance the position of its markets. Just recently, the Japanese have begun to allow foreign commercial banks to enter into joint ventures to engage in securities un-

derwriting in their markets. That is highly significant because it means that the foreign commercial banks can do in Japan what Japanese banks cannot do in Japan let alone in the United States.

We have no doubt that when Japan decides that the time has come to further advance its competitive position, the Japanese will move very quickly to dismantle their version of Glass-Steagall.

As I mentioned before, there are three ingredients that are required to be an effective competitor in the global financial markets: capital; skills; and the ability to offer a full range of services in all major markets, particularly in a firm's home market. Those firms that do not have all three attributes are unlikely to be major competitors. Because we generally deny firms the ability to offer both commercial and investment banking services in the United States, we unnecessarily limit the ability of our own firms to compete in the various markets around the world and we restrain the growth of our own markets. If we want our firms and our markets to compete effectively, we need to loosen the ties with which we have bound our own hands.

[The complete prepared statement of Roberto G. Mendoza follows:]

Statement of Roberto G. Mendoza

Mr. Chairman and Members of the Committee:

My name is Roberto Mendoza and I am an Executive Vice President of Morgan Guaranty Trust Company of New York. From 1980 until 1985 I was involved in the management of Morgan Guaranty's international securities business. Since that time I have headed Morgan's activities in the area of mergers and acquisitions. I appreciate the opportunity to appear before this committee today to discuss the internationalization of capital markets and, in that context, the impact of the Glass-Steagall Act on the competitiveness of American capital markets and financial firms.

I will limit my remarks to the international implications of the Glass-Steagall Act, but at the same time I want to emphasize that the Glass-Steagall Act seriously impedes the ability of U.S. commercial banks to adapt to the profound changes taking place our own domestic markets. The Glass-Steagall Act not only precludes banking organizations from improving their safety and soundness through diversification into the generally less-risky field of corporate securities underwriting, but it also perpetuates the high level of concentration that is present in the securities business in this country today.

We at Morgan believe that it is important not only to us but also to the interests of the United States that American financial firms and American capital markets be competitive on a global scale. Given the interdependence of financial and political forces, the stature and influence of a nation's financial firms is a matter of considerable national interest. This is particularly true as the financial activities of American industry and government become increasingly international in scope.

American capital markets must be competitive and efficient in order to achieve optimal levels of capital formation in this country. In addition, as the United States strives to redress its international trade deficit, it will need to look in greater part to the services sector. Strong, competitive capital markets in this country can make a significant contribution to our ability to export financial services, adding to domestic income, employment and investment.

We can no longer take it for granted, however, that American firms will continue to be major competitors in world markets or that American capital markets will keep pace with markets located abroad. The signs that we see indicate otherwise.

In the first place, American financial firms are no longer the undisputed leaders in the international capital markets. While in 1982 six of the top 20 Eurobond underwriters (and three of the top five) were American firms (see Table 1), today only four of the top 20 are American and none of these is in the top five (see Table 2). By way of contrast, three of the top five and seven of the top twenty firms today are Japanese.

In addition, it is worth noting that many of the leading American securities firms, as they seek the capital and overseas know-how that they need to compete on a worldwide basis, have had to turn to foreign investors. For example, a nearly 40% interest in First Boston, one of the leading American securities firms, is owned by an affiliate of Credit Suisse, a major foreign commercial bank doing business in this country. The Chairman of First Boston's Executive Committee, William E. Mayer, has been quoted as saying that the Credit Suisse investment "saved our business and made us takeover-proof."* There are other examples: Groupe Bruxelles Lambert, a holding company that owns a controlling interest in Banque Bruxelles Lambert, owns 28% of Drexel Burnham Lambert through a subsidiary. Jardine Strategic Holdings, Ltd., which is 45% owned by a Hong Kong holding company, has agreed to purchase 20% of Bear, Stearns. A 13% stake in Shearson Lehman Brothers is held by Nippon Life Insurance Company, and a 12.5% profits interest in Goldman Sachs is owned by the Sumitomo Bank. This is a trend that we believe will continue, and while we have no desire to curtail the ability of American securities firms to raise capital and form such alliances with foreign firms, we question the wisdom of excluding well-capitalized American banking organizations from participating in the U.S. securities business.

There is also ample evidence that foreign capital markets, and in particular the London-based Euromarkets, are growing faster than, and at the expense of, U.S. markets. The Eurobond market grew by 800% from 1980 through 1986, nearly half again as fast as the U.S. corporate bond market. American corporations are increasingly going to the Euromarkets to issue their bonds. Issues by American cor-

* Wall Street Journal, April 29, 1987.

porations in the Eurobond market grew at an average rate of 50% per year between 1977 and 1986, almost twice as fast as issues in the U.S. market (see Table 3). At the same time foreign issuers also continued to prefer the Euromarkets. While their Eurobond issues grew by 27% per year, their issues in the U.S. have actually declined (see Table 4).

While these statistics may be rather dry and lifeless, their message is a vivid one: we cannot afford to be complacent about the competitive position of our financial markets.

We believe that one of the primary reasons for these unfortunate developments is the anticompetitive inefficiencies imposed on both commercial banks and securities firms by the Glass-Steagall Act, although the rigors of our securities laws have also played a role in discouraging issuers from raising capital here.

Not only does the Glass-Steagall Act preclude full and open competition among financial services firms in the United States, but it also significantly constrains their ability to compete in capital markets abroad, even though it does not apply directly to their activities in those markets. This is because of the global nature of corporate finance today.

Businesses seeking to raise funds are no longer locked into their own home markets. Modern technology, especially global communications, the development of new types of financial transactions such as currency and interest rate swaps, and the growing sophistication of the markets allow businesses to raise funds wherever they are cheapest, regardless of currency or the location of the market.

Let me give you several examples. A typical U.S. industrial company that wishes to raise medium-term funds in dollars at a fixed rate to finance its capital expenditure program enjoys a number of alternatives today which were not available in the past. In addition to the options of floating a dollar issue in the domestic or Eurobond fixed-rate markets, it can also do a fixed or floating-rate issue in a broad range of convertible currencies -- yen, German marks, Swiss francs, sterling, French francs and even composite or synthetic currencies such as ECU's -- and swap the proceeds into fixed-rate dollars for the desired term. Obviously, a borrower will choose the option that carries the lowest cost. Those firms that have the ability to operate in all markets, the capital strength to execute the swap, and the corporate

finance skills to optimize the borrowing structure possess an overwhelming advantage in competing for the business of such borrowers against firms such as U.S. commercial banks which lack one of these three attributes.

The Glass-Steagall Act precludes all U.S. and most foreign commercial banks from underwriting securities in the U.S. debt and equity markets. From a public policy perspective this restriction weakens American commercial banks and diminishes the vitality of our markets relative to those foreign markets where similar inhibitions do not exist. We also believe that it weakens U.S. securities firms, but for somewhat different reasons: although they can engage in the full range of investment banking activities as well as provide as a practical matter all commercial banking services, they can do so only in an economically inefficient manner. For example, the commercial banking activities of American Express (the parent of Shearson Lehman Brothers) are divided among Boston Safe (deposit taking and personal banking), American Express Bank Ltd. (international commercial banking), and Shearson Lehman Brothers (investment banking and commercial lending). Dividing up their banking activities in this manner denies them the economies that would be gained by offering both lending and deposit taking in the same entity. These economies have been documented in recent academic studies.*

The public policy costs of the Glass-Steagall restrictions are perhaps most apparent in the pure equity underwriting area. A significant proportion of the equity issues floated by American corporations in the U.S. market involve a simultaneous offering abroad (19% in 1986 and 30% so far in 1987, measured by dollar amount). As a practical matter these offerings, which nominally incorporate domestic and "Euro" tranches, actually represent a single integrated offering -- one for which U.S. commercial banks cannot compete.

I should note here that we find it indeed strange that the United States permits some of our major competitors -- the 15 foreign banks grandfathered under the International Banking Act of 1978 (see Table 5) -- to engage in both com-

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* See, for example, Thomas Gilligan, Michael Smirlock, and William Marshall, "Scale and Scope Economies in the Multi-Product Banking Firm, Journal of Monetary Economics, pp. 393-405 (1984).

mercial banking and full underwriting activities in this country. These organizations have a true competitive advantage and they are more than an interesting anomoly. In the last half of 1986, the affiliates of six of these banks were members of underwriting syndicates which underwrote over $20 billion of debt and $4.2 billion of equity in the U.S. markets. Deutsche Bank Capital, Swiss Bank Corporation International and UBS Securities have been particularly active. Since 1984 they have served as lead or co-managers for 41 debt and equity issues in the U.S. This figure does not include First Boston, an affiliate of one of the grandfathered foreign banks. Inclusion of First Boston's underwriting activity would increase this figure dramatically. First Boston/CSFB underwrote more taxable fixed income and equity securities worldwide than any other firm in 1986.

At the same time that we allow these foreign firms to engage in a full range of financial activities in this country, we limit the competitive abilities of American firms both at home and abroad. U.S. commercial banking organizations are uniquely qualified to compete in the markets around the world. As Professor Sam Hayes at the Harvard Business School noted in a recent book, "the Glass-Steagall Act, by barring commercial banks from participating in most aspects of underwriting, created barriers to entry that effectively excluded the best-positioned potential competitive entrants."* American commercial banks have the necessary combination of capital and skills; all that they lack is the ability to utilise those attributes in the U.S. markets.

The Glass-Steagall Act also is a major factor in limiting the amount of activity that takes place in U.S. capital markets as compared with markets abroad. Except for the grandfathered foreign banks, the Glass-Steagall Act bars commercial banks doing business in the U.S. from full participation in underwriting activities in our markets. Not only are American commercial banks excluded but also such potential foreign competitors as Barclays Bank and National Westminster. As a result, American markets are not as competitive as they otherwise might be.

In fact, U.S. securities markets are highly concentrated. Over the last four years, eight firms have

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* Competition in the Investment Banking Industry (Harvard University Press, 1983).

accounted for 90% of the corporate debt underwritten in the U.S. (see Table 6). The commercial paper market is even more highly concentrated. Five firms account for 95% of that market. In comparison the Eurobond market, which is unencumbered by Glass-Steagall type restrictions, is far more competitive and, as I noted earlier, has grown faster and at the expense of our own markets. The top eight firms in the Eurobond market account for only about half of the debt underwritten in that market (see Table 6), while in the Eurocommercial paper market the top five firms account for 41% of the commercial paper programs signed by the top 40 firms (based on nominal value; figures on outstanding amounts of Eurocommercial paper are not available).

The value of competition to the development and growth of markets has been recognized by foreign market regulators. The Big Bang in Great Britain, the recent reform of financial regulation in Canada to allow commercial banks and other financial firms to engage in securities activities through affiliates, and the various steps being taken in France to reform the markets there have all been taken with one thought in mind: to improve the competitive position of the markets in each of those countries. In this connection, however, we should be mindful of another point: we cannot expect that countries that have opened their securities markets to our commercial banks will extend their welcome indefinitely if we do not take steps to allow their firms to participate to the same extent in our markets.

Even Japan, which has its own version of the Glass-Steagall Act, has taken steps to enhance the position of its markets. Just recently the Japanese have begun to allow foreign commercial banks to enter into joint ventures to engage in securities underwriting in their markets. We have no doubt that when they decide that the time has come to further advance their competitive position, the Japanese will move very quickly to dismantle their version of Glass-Steagall.

If we reform the Glass-Steagall Act, there is every reason to believe that foreign and domestic banks would significantly expand their activities here and thereby increase investment and employment in this country. It is clear that London has benefited enormously from the growth of its financial sector.

As I mentioned before, there are three ingredients that are required to be an effective competitor in the global financial markets: capital, skills, and the ability to offer

a full range of services in all major markets, particularly in a firm's home market. Those firms that do not have all three attributes are unlikely to be major competitors. Because we generally deny firms the ability to offer both commercial and investment banking services in the U.S., we unnecessarily limit the ability of our own firms to compete in the various markets around the world and restrain the growth of our own markets. If we want our firms and our markets to compete effectively, we need to loosen the ties with which we have bound our own hands.

Table 1

LEADING EUROBOND UNDERWRITERS
1982

Rank	Manager	Amount $mill	Share %
1	Deutsche Bank	7,947.5	17.0
2	Credit Suisse First Boston	6,264.5	13.4
3	Morgan Stanley	4,433.0	9.5
4	Salomon Brothers	2,223.5	4.7
5	Morgan Guaranty	1,829.3	3.9
6	S. G. Warburg	1,530.8	3.3
7	Union Bank of Switzerland	1,341.5	2.9
8	Societe Generale	1,228.9	2.6
9	Merrill Lynch Capital Markets	1,115.1	2.4
10	Goldman Sachs	1,058.2	2.3
11	Swiss Bank Corporation	1,032.3	2.2
12	Banque National de Paris	956.8	2.0
13	Commerzbank	929.5	2.0
14	Nomura Securities	921.5	2.0
15	Dresdner Bank	756.8	1.6
16	Credit Commerciale de France	588.2	1.3
17	Paribas	587.2	1.3
18	Samuel Montague	575.0	1.2
19	Westdeutsches Landesbank	567.2	1.2
20	Kidder Peabody	549.9	1.2

Note: Full credit to book manager

Source: IDD Information Services

Table 2

LEADING EUROBOND UNDERWRITERS
January 1987 - September 1987

Rank	Manager	Amount $mill	Share %
1	Nomura Securities	15,412.0	12.3
2	Credit Suisse First Boston	8,826.0	7.0
3	Deutsche Bank	8,225.1	6.5
4	Daiwa Securities	7,531.3	6.0
5	Nikko Securities	7,462.5	5.9
6	Yamaichi	7,301.9	5.8
7	Morgan Guaranty	4,828.6	3.8
8	Morgan Stanley	4,804.0	3.8
9	Salomon Brothers	4,120.2	3.3
10	Paribas	3,459.7	2.8
11	S. G. Warburg	3,159.2	2.5
12	Industrial Bank of Japan	3,082.5	2.5
13	Union Bank of Switzerland	2,976.9	2.4
14	Dresdner Bank	2,157.1	1.7
15	Swiss Bank Corporation	2,094.6	1.7
16	Commerzbank	2,064.7	1.6
17	Goldman Sachs	1,937.1	1.5
18	Baring Brothers	1,707.3	1.4
19	Bank of Tokyo	1,644.3	1.3
20	Long Term Credit Bank of Japan	1,618.8	1.3

Note : Full credit to book manager

Source: IDD Information Services

Table 6

CONCENTRATION IN CORPORATE UNDERWRITING:
EUROMARKET VS. U.S. MARKET

Percentage of the total dollar volume of corporate debt securities underwriting managed by the largest securities firms in the Euromarkets and in the U.S.

	1983		1984		1985		1986	
	Euro	U.S.	Euro	U.S.	Euro	U.S.	Euro	U.S.
Top 4 firms	36%	60%	38%	68%	32%	65%	31%	60%
Top 8 firms	50	89	56	91	50	91	49	90
Top 10 firms	54	92	61	94	56	94	55	93
Top 16 firms	66	97	71	99	66	98	68	98
Top 20 firms	72	98	77	100	73	99	74	99
Total amount ($ bil.)	48.3	47.6	79.8	73.6	135.4	119.6	187.0	232.5

Source: IDD Information Services, Inc. and Euromoney. Figures give full credit to bookrunners.

The CHAIRMAN. Thank you very much, Mr. Mendoza.

This is interesting testimony. Mr. Heimann gave a fascinating description of the globalization of the markets but said nothing directly and explicitly about Glass-Steagall. Mr. Levich and Mr. Mendoza concentrated very largely on Glass-Steagall.

Mr. Mendoza, I noticed that you rely to some extent on those fine tables which you gave us, table 1 and table 2. It seems to me they don't prove your fundamental argument. Table 1 provides the leading Eurobond underwriters in 1982. Table 2 provides the leading Eurobond underwriters in 1987.

What strikes me is the fact that—as you pointed out but you didn't indicate what follows from it—that whereas the United States dropped roughly to half of what they had in 1982 in only 5 years, the Japanese exploded from 2 percent to—let's see, I will add it up—almost 33.8 percent.

Now, both had laws like Glass-Steagall in effect throughout that period. So it seems a bit hard to argue that Glass-Steagall is the reason why we did so badly. What is your answer?

Mr. MENDOZA. Mr. Chairman, that is a very fair point. The rationale behind our position is that there is a further factor at work that we did not discuss because it did not relate directly to the instructions we were given on what you wanted to hear today.

What is happening in terms of the growth of the Japanese firms is that they operate in highly protected domestic markets, both securities and banking markets. In the domestic Japanese markets, securities firms are protected from competition from banks and banks from securities firms. And both of them are protected from competition by foreign firms.

The result of that is that the Japanese firms can use extraordinary domestic profits to enable them to establish beachheads in foreign financial markets through devastating price competition in

exactly the same way that a number of other Japanese industries are very effectively, from their viewpoint, using a protected home market to establish an export base.

What has not yet happened in Japan is the deregulation of the domestic market. That is what has happened in the United States with the deregulation of the fixed-commission structure. When that happens in Japan, as it inevitably must, we believe that will lead to an integration of the commercial and securities underwriting function and greater market power.

The explanation for the growth of the Japanese financial firms is that they quite properly in our view, are using the same strategy that they have used in other industries: protect the domestic market, in effect, to fund expansion on a worldwide basis.

The CHAIRMAN. I think that's an ingenious and undoubtedly accurate description of what happened, except the fact is the Japanese increased their proportion of Eurobond underwriting seventeenfold during this 5-year period with Glass-Steagall.

And that was the principal reason, as I see it, analyzing your tables, why the United States share dropped as sharply as it did. At least it was a contributor to that drop.

I'd like to ask Mr. Heimann: Mr. Heimann, as you know, I've got the greatest respect and admiration for your ability. You were superb in your job you did here in the Federal Government when you were working here. What is your position on Glass-Steagall?

Mr. HEIMANN. Mr. Chairman, I'm surprised that you asked that question. [Laughter.]

POSITION ON GLASS-STEAGALL

I must say I feel a little bit out-gunned and out-numbered at this table. We have two very clear views on Glass-Steagall. I have to say that mine is a little less clear.

I would start out by saying, Mr. Chairman, that I absolutely, firmly believe that the Glass-Steagall Act and the Bank Holding Company act must be totally re-evaluated and re-examined. And I commend this committee for being a part of that process.

And I have held that view since I was superintendent of banks in New York State in 1975.

I would start out on the basis of where I do agree that something has to be done, and the financial intermediary structure in the United States has been built over a vast number of years. And the changes that have taken place in the financial system domestically as well as internationally, we don't think that we have kept pace. At least to me, that is a given.

It seems to me that what we have to be concerned with here are a series of related issues. You cannot look at Glass-Steagall purely from an international point of view.

It is true and I agree with Professor Levich and Mr. Mendoza that one of the major problems that face the commercial banks in this country is, in fact and, indeed, foreign competition. I think that's very clear.

But our banking structure in the United States is so confused and so diverse that we are talking about fundamental changes that not only affect the primary international competitors.

I'm not sure how to categorize them, but let's just call them the larger financial institutions. But we also have to take into consideration the great tapestry of financial services in the United States, encompassing the thousands upon thousands of community banks, credit unions, thrift institutions of all sorts, because we cannot, I don't think—at least in my opinion—tinker with the structure in the way that if we solve one problem, it may set off a chain of events in another sector that are of real concern to the country.

So I'm very much in favor of the re-evaluation and re-examination. I think we have to look at it not only in the light of international competition, but in a series of other criteria that I think are terribly important, all of which people have testified to in front of this committee. I won't go through the entire list, but, fundamentally, economic concentration, the service access to financial systems of all the people in this country, and free and open access on a prudent basis; How do we combine all of these with changes in the Glass-Steagall Act and the Bank Holding Company Act?

I would then say my personal position is that I'm very much in favor of seeing change. As a matter of fact, I think the only constant in our life is change. I'm not sure, however, that I have seen enough debate and discussion as to the scope and the nature of those changes.

I would prefer to see a continuation of a process that you and this committee have instituted, of trying to evaluate all of these items and putting them together.

Let me just say one other final thing. I've gone on too long. And that is, even though I favor change, in effect, I favor total change. I do not favor piecemeal change.

I think that if we are going to change the financial intermediary system of this country, we must change the whole system. We don't change bits of it, because by doing that, we can have the effect of upsetting the balances that have been reached and that's the way the system has been functioning quite effectively for, lo, these many years, by just tinkering at the edges.

Thank you.

The CHAIRMAN. Thank you, Mr. Heimann.

Senator Bond.

Senator BOND. Thank you very much, Mr. Chairman. I congratulate you and I want to thank the panelists for a very thoughtful discussion of the global securities market and, the challenges and the opportunities we face.

I found it most helpful to have your expertise. I appreciate the chance to ask you a few questions about it.

Mr. Heimann, as a former regulator, do you feel that bank regulators have the expertise to police the boundaries between federally insured deposits and other activities of a diversified financial firm?

If we do make the big change that you suggest, are there additional powers that we should give on the bank regulators to deal with problems?

BANK REGULATORS

Mr. HEIMANN. Well, sir, let me try to respond to that by saying that the regulatory agencies have the capacity to extend their

reach over time, but in reality, what has been suggested in this instance is that we have functional regulation; that if, in fact, the Congress decides to make changes in the Glass-Steagall and Bank Holding Company Act and that that change involves the affiliates of a holding company with affiliates.

I would argue very strongly for functional regulation by the relevant agencies, which, in fact, do have the experience, i.e., the SEC. But it raises another question. And that simply is: Even under that sort of structure in which you have affiliates that are regulated functionally by those supervisors who have the skill, who supervises the whole?

In other words, you can have the SEC regulating the securities affiliate and the Comptroller or the Fed, whoever happens to be regulating the banking affiliates. But that raises the very real issue: Who regulates the holding company?

Now, my experience as a regulator has always led me to believe that manipulation of financial institutions is easiest for those who are so inclined when they are operating under different jurisdictions. Many of the banking problems we have had over the years have occurred in holding companies that move between the holding company and State-chartered banks and nationally chartered banks. They used that capacity to move to injure, frankly, the banking system.

The banking regulators have gotten together in recent years, so they have simultaneous examinations.

The point I'm trying to get at is, yes, functional regulation with the appropriate agencies can be extremely useful.

But then the Congress has to address forthrightly and up front: Who supervises the whole?

Even though we have adequate supervision, let's say, over the pieces.

Senator BOND. I might carry that one step further and ask, if we were to establish a system such as I understand they have in London under the big bang, where the job of regulators is to police the boundaries, who cares who supervises the whole?

Are you advocating Federal Reserve or other regulatory authority over holding companies in the situation we assumed might happen?

Mr. HEIMANN. Senator, I'm raising the issue that there must be oversight of the whole. Now, whether that is a new regulator or the law is written in such a way that the separate regulators must have an umbrella organization to which they belong and deal with these issues of movement between affiliates and subsidiaries, that, I think, is the subject of a good debate.

But, I don't feel—I strongly don't feel—that you cannot have a system with no oversight because that, historically, has always been where the problems are. And people haven't changed that much.

Senator BOND. I'd like to hear Professor Levich's comments on that question.

Mr. LEVICH. I think that's an interesting point that you've raised. I think, just for the few moments I've thought about it since you've raised it that entities will choose what functions they want

to supply; that there would be many of the 14,000 banks that would choose to remain in the commercial banking, period.

There would be some investment banks that would choose to move into commercial banking. And there would be perhaps some industrial companies that would choose to expand their operations in the financial services industry to include more commercial banking services or investment banking services.

And if the entity which is at the top would be labeled a bank and thought of as a bank, then, presumably, the bank holding company regulators would be charged with overseeing the entire entity.

But I sort of agree with the point that as long as people are policing the individual activities at the boundaries that these companies are getting into, that that would provide a reasonable amount of assurance that abuses and frauds such as might happen can get lost in the grass and would not actually occur.

Senator BOND. Thank you, Mr. Chairman.

The CHAIRMAN. Senator Riegle.

Senator RIEGLE. It's so interesting how this discussion moves right back to this centerpiece on how we considerably redo the financial services industry.

It's obvious that more thought is needed. We're really in the midst of a very complex debate. And I'm not sure we're yet ready to complete it.

If we maintain Federal deposit insurance and the whole access to the Fed for commercial banks, it's still not clear exactly how we do all that, no matter what supervisory system is functional: We need some broad kind of supervisory system of an overall holding company to prevent the problems of claims against the Government.

I had a fellow come in the other day, Mr. Chairman, who was named by President Reagan to a panel to oversee the problems of the savings and loan industry, and a very smart fellow from New York City who has no particular background in the savings and loan business, but who has spent a lot of time now studying it.

He came in and he said:

I think I now see what's happening here.

He said:

As nearly as I can tell, the Federal Government is underwater in terms of savings and loans to the tune of about $45-50 billion today, and that if you were to deal with the problem, that's the check the government would have to write to deal with the problem.

He went on to say:

That's the good news. The bad news is that if you wait 1½ years, the figure is probably going to be $150 billion.

Now, I don't know whether he's right or not, but there are a number of other people around who think that the problem and the dynamics of the problem are on the order of magnitude.

I only cite that as an analogy because if, in fact, the Federal Government is going to have to write a great big check some day because of the problems that have accumulated in the savings and loan industry—and we're in the process of doing one for the farm credit system—I think it puts a particular burden on us to understand what deposit guarantees mean under the banking system to the FDIC, especially if we're going to breach Glass-Steagall, and

maybe the Bank Holding Company Act, and we are really going to scramble all these different activities that, in the past, have been kept apart.

I sense you can lose a lot of money in these businesses, which brings it to not just a question of crossing the fence into a greener pasture and making money. There may be opportunities to make money, but there are also opportunities to lose money and recently banks have been losing money on a lot of things they know well, like foreign lending.

So I'm not sure there's a guarantee that there's a great big mass of profitability out there to go and get if we take these walls down.

But, having said that, how would you feel Mr. Mendoza, about taking away Federal deposit guarantees from the commercial banks?

Do we still need that?

REMOVAL OF FEDERAL DEPOSIT GUARANTEES

Mr. MENDOZA. I believe we do, Mr. Riegle, yes. I would add that the analogy which you draw with the savings and loan industry is a highly interesting one.

Senator RIEGLE. I don't mean to suggest any one for one. I just cite that as a current problem.

Mr. MENDOZA. I understand that, sir. I would say that we clearly believe that there is no guaranteed route to profitability in any business, whether it be commercial banking or securities underwriting.

But all of the evidence, both anecdotal and theoretical and academic, indicates pretty strongly in our view that the securities underwriting business is fundamentally less risky than the commercial lending business, for a number of reasons.

The time period over which you take risks is much shorter. It's measured in seconds, minutes, hours—at the most, a few days—not 10 or 15 years. And liquidity, per se, adds value to a financial instrument.

So, for both of those reasons and the historical record, we believe that the expansion of powers would increase the safety and soundness of the banking system rather than threaten it in any sense.

We would also add that we think it's absolutely possible to insulate completely the traditional commercial banking activity from the securities activities under a holding company structure.

Senator RIEGLE. You say it's important to keep the deposit insurance, and I wonder why because we're talking about affiliated business activities where there is no deposit insurance. If there's going to be this broad expansion of a host of new activities, maybe we ought to think about having the Government step out in terms of that deposit guarantee system.

Mr. MENDOZA. I think, over time, it would be perfectly possible and there is evidence that private insurance could step in. The securities industry does, as an example, have private insurance. It also has an insurance mechanism which has a great many similarities to FDIC insurance, including a $1 billion line of credit from the SEC backed by the Treasury.

But, we would distinguish between that and the systemic need for deposit insurance in the commercial banking system, because the overwhelming majority of commercial banks have no interest in securities activities.

We think that for the system that would make sense. But we think that for the very small number of banks that would be interested in going into the securities business, there is no need to eliminate insurance coverage because the securities subsidiary would not have the benefit of deposit insurance. It would be completely insulated.

Senator RIEGLE. My time is up.

The CHAIRMAN. Thank you, Senator Riegle.

Senator Karnes.

Senator KARNES. Being from a State that is dominated by smaller financial institutions, I would pose a question to you.

What are the advantages you would see to a smaller financial institution, a smaller bank, a rural bank, by increasing securities powers for them.

What advantages you would ascribe would accrue to a small financial institution.

ADVANTAGES FOR SMALL FINANCIAL INSTITUTIONS

Mr. MENDOZA. Thank you. I feel ill-equipped to comment on the advantages of smaller banks because I'm employed by a larger bank.

I think that, in terms of the customers of smaller banks, the existing high degree of concentration in the securities industry would suggest that the repeal of Glass-Steagall would expand the universe of suppliers of financial services to smaller businesses, which are perhaps not as well served now as they would be if there were more competitors.

While I don't feel qualified to talk about the implications for smaller banks, I would only say with respect to the regulatory issue that has been raised before that any expansion of activities by banks should be subject to regulatory oversight, including capital strength and necessary skills.

Presumably, not all banks would wish to, or would be permitted to, enter into the full range of securities activities.

Senator KARNES. Mr. Heimann.

Mr. HEIMANN. It seems to me that what we have seen in our country is an extraordinary explosion of financial services that are available throughout the breadth and width of our land, throughout Nebraska and elsewhere.

Credit cards are available from Citicorp, which is located in New York City, right across this country. And Merrill Lynch has cash management accounts, which stretch across this country, just to use two examples.

I think the advantage to the local communities is in terms of additional financial services. Sears Roebuck has just turned out 15 million Discover cards. I think that's the number, and it's growing rapidly.

We have extraordinary competition. Prices are coming down. Services have exploded. The question you ask is a fascinating one to deal with.

What are the benefits to the smaller and rural community banks by deregulation of the Bank Holding Company and Glass-Steagall?

I would answer that on a theoretical basis. Because the smaller community bank now is faced with Citibank and its credit card, faced with Sears Roebuck and Discover, Merrill Lynch with its cash management account, they have a ton of competition beating down on them and taking customers away. They're going to have to compete for the customers, which will benefit their customers.

And that is, if there is an argument here for repeal of Glass-Steagall, it has to be based on increasing the strength and the vitality and the competitiveness of the American financial system, domestically and internationally. That has to be the reason.

That is the logical case that has got to be proven because if the financial system is strengthened as a whole, then all of the good participants within it will be strengthened. That follows.

That, to me, is where the case has to be made to satisfy, I think, your very good question.

Senator KARNES. I have no further questions, Mr. Chairman.

The CHAIRMAN. Senator Sasser.

Senator SASSER. Thank you, Mr. Chairman.

Mr. Heimann, I apologize for not being here to hear you deliver your statement personally, but I have read it. And I find it very interesting.

You indicate that we in the United States significantly completed deregulation of our capital markets in the 1970's, and the United Kingdom with the Big Bang, which transformed London, and Japan, which remains probably the most heavily regulated capital market, is moving toward deregulation.

The thought comes to me, historically—I wouldn't hold myself out as any student of economic history at all—but historically, we've moved from a time of no regulation and the financial structure was subject to the vicissitudes of the business cycle, et cetera, to a period of regulation, beginning in the late 19th century in Europe and culminating here in the United States with Glass-Steagall in the 1930's.

And you describe these great flows of capital that cross international boundaries now with ever-increasing velocity.

Where is all of this taking us in terms of safety of the financial system?

As a former regulator, that must have occurred to you, I'm sure. And given the way individuals or institutions or groups have been able to manipulate the system in countries where there's regulation, what about manipulation of these great international markets based on the flow across international lines?

What about the events would affect the financial structure?

For example, what if we did have to cough up $150 billion to bail out the thrift system here in the United States? What does that do to the international markets?

EFFECTS OF BAILOUT ON INTERNATIONAL MARKETS

That's a big question. But you draw a big picture in your statement and I hope you can give us a large answer this morning.

Mr. HEIMANN. Let me try to give a short answer to a very large and exciting intellectual question that's been raised.

There isn't the time today to go through the history of the financial system. Most people have forgotten how it all happened and why it happened.

But at one point in history, central bank lending activity was created by the Bank of England, I think about 1890, and it wasn't for the commercial banks, it was for the merchant banks who got in trouble with—surprise, surprise—their loans to what were then called developing nations.

Now, of course, we view central bank liquidity provisions as a commercial banking phenomenon, but it was born in merchant banking.

I could go on. I think you have to reach this sort of philosophical question. You don't want government, any government, to run the financial intermediary system. Countries that have tried that have had bitter experience with it over the long-run, and the short run.

But you ought to have a free and an open and a competitive financial system, domestically and internationally.

As an end result, that provides the best services for the users of the system, from the consumer to the governments that borrow and the corporations, at as low as possible cost.

So the question is: How do you have a free and open system knowing that there will be people who come into that system who wish to take advantage of it?

And there always are. You're absolutely right. It's happened plenty of times in the United States. It's happened in Britain. It's happened in every country in the world, and will continue.

And it really comes back to creating a supervisory network of some sort that discourages those who are so inclined from entering, and catching those who are so inclined as early as possible in the process of taking advantage of the system.

That means in this day and age it is no longer good enough to have domestic supervisory systems. They must be linked in some fashion internationally so that the manipulator cannot manipulate jurisdictions.

In other words, we have to insure manipulators cannot use the financial system through London, through New York and, through Switzerland or anywhere else.

You really have to have a harmonization of international standard-setting amongst the supervisors, not to prevent what you're afraid of from happening, but to catch it as early as possible, to discourage those who are so inclined.

Second, if you're talking about the extraordinarily large exogenous shock that nobody foresees, it's very true that whatever happens in one country will ripple across the markets and it will have an effect on other markets almost simultaneously.

But that again becomes the responsibility, frankly, of Government to solve in the sense of stepping in and calming the problem because the private side, the individual institutions, cannot do it

themselves. For example, the FSLIC bill that was passed by the Congress, is an attempt to stabilize a problem now.

Senator Riegle says we don't know the extent of the problem. But the end result has been that it stabilized the situation in the public's mind. They now have no particular fears for the safety of their deposits.

What I'm getting at is that those kinds of problems which you so thoughtfully raised really fall eventually into the Government's hands to solve, or the supervisory preemptive action.

Senator SASSER. Thank you, Mr. Heimann.

Before relinquishing the forum here, I'd like to ask unanimous consent that my statement be included in the record.

The CHAIRMAN. Without objection, it will be put in the record. Senator D'Amato.

Senator D'AMATO. Mr. Chairman, I'd like to put a statement in the record, with your permission.

The CHAIRMAN. Without objection it will be placed near the beginning of this hearing.

Senator Graham is recognized.

Senator GRAHAM. Thank you, Mr. Chairman. I regret I was not here to hear the statements read. I'm very impressed with the insight of this panel.

Mr. Heimann, you made a response in response to an earlier question that we should be cautioned to avoid piecemeal approaches to this issue.

ISSUES TO BE DEALT WITH

What would you describe as the essential critical mass of issues that would have to be dealt with concurrently in order to avoid that piecemeal approach?

Mr. HEIMANN. I think some of the issues, Senator, that have been raised here today—one by Senator Riegle, for example, regarding the role of Federal deposit insurance in this new or changed system. And the list that I have is not a complete list, obviously.

I'm glad to submit that. But I have a feeling you've heard it a number of times from other witnesses attending these hearings.

I think we have to get to the fundamentals. What is the role of deposit insurance and how is that to be re-rationalized, if at all, in the years to come in the new financial system? And how is that not to be used for purposes other than protecting the depositors?

I don't think as yet that the Congress has dealt with the issue as to what is deposit insurance for.

Is it to protect the depositor? Is it to protect the bank? Is it to protect the banking system?

All are perfectly legitimate and correct questions that have to be answered. You have to answer those first before you can then address Senator Riegle's question.

When you have a commingling of activities, where does deposit insurance fit in all of this?

What is the role of deposit insurance? What do we want our financial system to look like?

Questions of economic concentration, for example, which have always been very important in this country. Questions of access to the financial systems, access to the governmental financial system, as well as to the broad public financial system, that is if you have a breakdown in Glass-Steagall, do the securities houses, for example, have access to the discount window of the Federal Reserve?

That's one of the other kinds of questions that fit in this broad list. That's where I would start, and I would work back from the fundamentals rather than from the question of granting additional powers to either the securities houses or to the commercial banks, which really is something like icing on the cake, which doesn't affect the fundamentals but just deals with the self-interest of the parties that are involved.

They all very much have great self-interest. And that's understandable. They lobby for that. But the point is that doesn't face the fundamental problem of how do we change the financial system in this country.

Just one more word on that. We say all banks are the same, all national banks are regulated the same. But there's a world of difference between the giant, multinational commercial bank and Senator Karnes' rural community bank.

Yet, they're operating under effectively the same law. I would like to see that issue addressed.

Do we have a dual banking system in the United States? I don't mean State-chartered/national chartered. I mean, do we treat our large banks differently from the small banks?

That is, sir, where I would start.

Senator GRAHAM. If the other two panelists would have any contributions to that critical mass issue.

Mr. LEVICH. I would agree with most of what Mr. Heimann said. I would like to agree with one of his earlier comments that, indeed, that they reform the entire financial system rather than piecemeal kind of reform.

As has been argued here, financial markets are highly integrated and move in many different directions. So it is critical that you deal with the entire financial system rather than just pieces of it.

I think it's important on the point of the FDIC and the role of insurance to make a distinction between the protection of the system versus the protection of individual institutions.

And I would agree with the point just made by Mr. Heimann that there appears to have been a differential in treatment of large banks versus small banks. But that is part of the problem of how insurance is set up and it can develop into problems if it tries to bail out every institution. But not the system as a whole.

Mr. MENDOZA. Senator Graham, I would also agree that a complete overhaul is preferrable to partial reform. But I would also say that partial reform is better than no reform.

I think that one of the perhaps critical differences between our views is that I would argue that the problem can be narrowly defined, which is not to say that it is a simple problem, but it is a narrow problem.

What we are talking about is allowing commercial banking organizations to underwrite corporate securities in the United States, something they can do everywhere else in the world. And also granting securities firms a genuine two-way street, allowing them to perform all commercial banking functions in an efficient way.

To give you an illustration, securities firms can now perform all banking functions but in an inefficient way. The American Express Co., in addition to owning two life insurance companies and a property and casualty company, conducts securities underwriting activities through Shearson Lehman Brothers and extends commercial loans in very large size through Shearson Lehman Bros.

Shearson Lehman Bros. owns a bank which, in 1 year, has gone from being the 49th largest bank in the country by way of deposits to the 25th largest bank.

It has federally insured deposits and it engages in a full range of deposit-taking, personal lending activities.

So, within that one example, you have all commercial and all investment banking functions functionally regulated within the present system.

I would argue that the narrow issue can be cleanly addressed and you just give both industries, both of which are regulated, both of which are insured and both of which promote their own self-interests, give them a two-way street. And the result of that would be a system that is stronger than the current system, which has inefficiencies built into it. And that stronger system would lead to more competition in the provision of financial services.

And here I'm going to go back to the point that was made about the customers of the smaller banks. We're not talking about, or I was not talking about the provision of credit cards and personal banking services. I was rather talking about the provision of corporate finance services; as an example, advice in the merger and acquisition area or takeover finance.

Those kinds of services would be more freely available to a larger universe of companies in the event that you broke down the restrictions.

The CHAIRMAN. Thank you, Senator Graham.

Mr. Heimann, I'm intrigued. You're a brilliant man. What you've given us this morning kind of puzzles me though.

You talk about the onrushing surge of change in the world, then you suggest that we kind of sit around and look at this thing and analyze it and consider the possibility of changing it, and so forth. Yet there's nothing that the Congress, especially in the financial area, does better than delay.

Let me ask you about a specific proposal for change. It doesn't go as far as repealing Glass-Steagall, but it's something I offered at the beginning of the year. I didn't get many votes for it, so we decided that we'd try something else. What I suggested then would be to permit banks to underwrite revenue bonds, commercial paper, and mortgage-backed securities and to sell mutual funds. None of these areas involved conflicts of interest or great risk. At that point, I would have kept banks out of underwriting long-term debt and equity. Now I'm not so sure I should do that.

Table 3

BOND ISSUES BY U.S. CORPORATIONS
IN DOMESTIC AND INTERNATIONAL MARKETS
($ billions)

	Domestic	International		
	New York	Total	Eurobonds	Foreign Bonds
1986	$232.5	$43.6	$38.6	$5.0
1985	119.6	39.5	36.3	3.2
1984	73.8	23.0	21.5	1.5
1983	47.6	7.3	6.1	1.2
1982	44.3	14.8	13.0	1.8
1981	37.7	6.8	6.2	0.6
1980	41.6	4.4	4.1	.3
1979	25.8	3.1	2.9	.2
1978	19.8	1.4	1.1	.2
1977	24.1	1.2	1.1	.04

Source: Federal Reserve Bulletin, Table 1.46.
OECD, Financial Statistics, Table I.11.
World Financial Markets, MGT.

Note: Foreign bonds are placed in a foreign country and are denominated in that country's currency. Eurobonds are placed simultaneously in two or more countries and can be denominated in any currency.

Table 4

BOND ISSUANCE BY NON-U.S. BORROWERS
IN THE U.S. AND EUROMARKET
($ billions)

	U.S.	Euromarket
1986	$6.1	$148.4
1985	4.7	99.1
1984	4.3	58.3
1983	4.7	42.2
1982	6.0	38.6
1981	7.6	27.7
1980	2.7	19.6
1979	6.6	15.8
1978	5.7	12.8
1977	7.8	16.5

Source: OECD, Financial Statistics, various issues, Tables I.11 and I.22.

Table 5

FOREIGN BANKING ORGANIZATIONS ALLOWED
TO ENGAGE IN SECURITIES UNDERWRITING
AND DEALING IN THE UNITED STATES UNDER
THE INTERNATIONAL BANKING ACT OF 1978

Germany
- Deutsche Bank
- Dresdner Bank
- Commerzbank
- Westdeutsche Landesbank
- Bayerische Hypotheken und Weschel Bank
- Bayerischen Vereinsbank
- Berliner Handels- und Frankfurter Bank

Korea
- Cho Heung Bank

Switzerland
- Credit Suisse
- Swiss Bank Corporation
- Union Bank of Switzerland
- Bank Julius Baer & Co. Ltd.

France
- Societe Generale
- Banque Paribas
- Credit Lyonnais

How about that halfway house? How about moving in that direction? Getting some action now rather than saying, well, let's study it for a while, and maybe next year, we'll study it a little further. And by then, this onrushing change is going to take place anyway.

Mr. HEIMANN. Thank you, Mr. Chairman. [Laughter.]

There's no question there's an on-rushing surge. But I have to really believe by indirection that that on-rushing surge cannot be matched by the committee in consideration of these questions.

The time and the deliberations that are necessary to discuss partial repeal are the same time that should be spent on dealing with these issues that we've talked about and total repeal or some modification thereupon.

I really am opposed to partial elimination of Glass- Steagall. That would be like attempting to fix a broken arm by giving the patient a shot of novacaine, instead of setting the bloody thing.

Clearly, what needs to be done, and I think everyone recognizes what needs to be done, is the system has to be overhauled.

If one starts to chip away at bits of it, the end result is the patient is not going to get much better—I mean, the total body of the patient. The total body is the financial intermediary system in this country.

It's not the commercial banks, it's not the securities houses or the investment banks. It's the whole thing. And I honestly believe that piecemeal change is the wrong way to go about it.

I appreciate what you're doing, Mr. Chairman, because you are pushing in the right direction. But, if you asked me my prescription as a doctor, I say let's set the arm, let's not just give novacaine.

The CHAIRMAN. Mr. Mendoza, let me ask you this. One of the reasons I suspect that you're interested in getting into underwriting is because you feel it's highly profitable, concentrated now, as you said. And some people would argue that it's taking oligopolistic profits.

On the other hand, as Senator Riegle noted earlier, we have Solomon Brothers getting out of the municipal bond underwriting business. They said they're losing money hand over fist—tens of millions of dollars, maybe hundreds of millions.

So what makes you think that this is going to be so profitable for our banks?

Mr. MENDOZA. Mr. Chairman, I believe that the underwriting of corporate securities has some highly profitable segments. The equity underwriting area in particular is extremely profitable, while at the same time there are some commodity-like segments in the debt markets which are of marginal profitability.

What an economist would like to have happen, is that you institute as efficient a system as possible by improving competition so as to reduce profits to a level that provides adequate, but not excessive returns. At that level services are provided to users in the most economically efficient manner.

The reason that I believe it is important for commercial banks to have securities underwriting powers and, vice versa, for securities firms to have full banking powers is that in this highly integrated financial world that we live in, firms that do not have completely

integrated servicing capacities are at a real competitive disadvantage relative to the ones that do.

You cannot just, in my view, take one segment and say that's profitable or unprofitable. You have to look at what that segment does for the business as a whole.

And I believe that the future lies with those firms that can offer all services.

The CHAIRMAN. Senator Bond.

Senator BOND. Thank you very much, Mr. Chairman.

To turn back to another area of investigation, Professor Levich, you were saying that your studies of in the Eurobond market certainly suggests that there is no reason not to tear down Glass-Steagall and deregulate.

Have you seen any evidence of self-dealing or other conflicts that proponents of Glass-Steagall say are very real and present dangers?

Do you gather any lessons from the global markets? And do you have specific recommendations as to anti-self-dealing or conflict provisions that ought to be included should we make a significant change or elimination in Glass-Steagall?

CONFLICTS OF INTEREST

Mr. LEVICH. In my studies of the Euromarkets I have come across evidence of conflicts of interest in practice in those markets. To take one example that's often cited, it's that securities underwritings that may be sold at $98–97 per unit in the open market are being sold at $100 per unit to trustee accounts within the bank, over which the ultimate beneficiary of the trustee account may not have complete information and knowledge of what's going on.

I think the answer to those kinds of conflict of interest questions would be the availability of information about prices of the securities that were being underwritten, and knowledge by the holders of those trust accounts of what they were being placed for in the open market and what they were being placed at into their accounts.

I think, in this market situation that we have today, there is technological change, which is bringing down the cost of information, bringing it down to be available to more people.

And the threat of competition from other institutions and the availability of information to people whose business is being transacted by these banks puts market discipline in place so that these kinds of abuses would be unlikely to happen in a situation where there's a great deal of information about pricing and a great many alternatives available to people who are doing regular commercial business trust activities.

Senator BOND. Do you think there are additional legislative or regulatory provisions that need to be included or adopted to assure dissemination of that information?

Mr. LEVICH. I do not believe so. I think most of the abuses that I'm aware of and that have been talked about in the Euromarket have been documented and would be against existing provisions in U.S. law.

And probably would not occur even in the first instance because of the vast availability of information in these American markets and the discipline of market forces.

Senator BOND. I'd like to address an additional question also to Mr. Mendoza and Mr. Heimann.

If you think that you're still seeing these problems now in global markets, what legislative or regulatory provisions might be needed to prevent their occurrence in a deregulated market?

Mr. MENDOZA. Thank you, Senator Bond. Let me, first of all, say that the conflict question is a very difficult one. One has to start off by recognizing that it is inherent in the business of being a financial intermediary whether a commercial bank, a securities firm or a hybrid, that there be conflicts.

John Whitehead said at one point that if investment bankers had no conflicts, they would have no business. Conflicts exist. What you do about them is you fully disclose them and you deal with them in an honorable manner.

The behavior that Professor Levich referred to is specifically illegal under U.S. law by U.S. firms. And I don't believe that the examples he cited refer to American firms.

Accordingly, though I would agree that those abuses do exist, I don't feel that any additional safeguards are necessary to the already extremely stringent anti-self-dealing provisions of U.S. law.

Senator BOND. Mr. Heimann.

Mr. HEIMANN. I think I agree with both the Professor and Mr. Mendoza, except I would come back to the original point that we talked about. And that is, in a new structure where you have affiliates, there must be a way to pierce the veil of the holding company's activities in one form or another to make sure that nothing is going on which is illegal or against the rules and regulations adopted by the Congress and put into effect by the relevant supervisory agencies.

Senator BOND. Thank you, Mr. Chairman.

The CHAIRMAN. Senator Riegle.

Senator RIEGLE. I have two questions. One I'm going to cite initially and have people respond for the record.

I'd like each of you, if you would, to respond for the record in terms of any investor safeguards you think may be needed for American investors as we now move into this more fully internationalized market system.

I want to know what you think we may need to do with respect to laws, safeguards, whatever, to make sure American investors are not taken advantage of in extreme ways, obviously.

Second, I would like any thoughts you have on the problems of safety and soundness that you see arising from the internationalization. We sort of play back again on the United States economy and financial structure.

I know there are some international settlement and clearance problems occurring in some places. I'd like your comments on those, how serious are they, do they have ramifications and implications here? If so, what are the public policy implications?

Do you have recommendations for us, things you think we should consider doing to deal with any problems in those kinds of areas?

[The following information was subsequently furnished for the record:]

ADDITIONAL INFORMATION REQUESTED BY
SENATOR RIEGLE FROM MR. MENDOZA

Are additional safeguards needed for American investors as international financial markets become more integrated?

The internationalization of the securities market does not require additional safeguards for the American public buying securities in the United States. Whether those securities are issued by foreign or U.S. companies, their issuance and sale in the United States must conform to the requirements of American securities laws and other laws. It is only when American investors venture abroad to buy securities in foreign markets that they must rely upon the foreign protection laws and disclosure requirements. Securities laws and disclosure requirements are not uniform among countries, and in most countries issuers are not required to disclose as much information to investors as they are in the U.S.

Nearly all purchases of foreign securities abroad are made by sophisticated institutional investors who have the ability to obtain and evaluate information about their investments without relying on legal disclosure requirements. Indeed, for that reason, many U.S. disclosure requirements do not apply to private placements with such investors.

Although the lack of uniform disclosure guidelines or a central regulatory body has not led to a disproportionate number of defaults or failures in international securities markets, steps are being taken by the SEC and regulators abroad to achieve greater uniformity in securities regulation, accounting standards, and disclosure requirements. The EEC, for example, has adopted directives designed to establish minimum standards

regarding listing requirements for exchanges and disclosure requirements for issuers. At the same time, the U.K.'s Financial Services Act has established a system of formal investor protection regulation for London-based Eurobond and Euroequity markets. These measures should improve the safeguards for American investors in foreign securities markets.

The Internationalization of Financial Markets and International Settlement and Clearance Problems

The internationalization of financial markets has been accompanied by an explosion of transaction volume which has raised the risks and consequences of failure in the settlement process. These risks cannot be fully eliminated, but they can be reduced substantially. In a recent speech, Dennis Weatherstone, President of J.P. Morgan & Co. Incorporated, offered several proposals on how to reduce settlement risk in international markets. A copy of that speech is appended hereto.

John G. Heimann
Vice Chairman, Merrill Lynch Capital Markets
Testimony to The Senate Banking Committee
10/13/87

Response to Senator Riegle
11/2/87

Subject: Global Clearance and Settlement Systems

It has become increasingly evident that the world's settlement and clearing facilities have not kept pace with the explosion of capital market activity in recent years. The head-long proliferation of sophisticated instruments and transactions has outstripped the development of effective control and facilitation systems. The resultant fragility of the clearance and settlement process is now an unpleasant reality.

At the 12th Annual Conference of the International Organization of Securities Commissions in September of 1987, Stephen Hammerman, Executive Vice-President of Merrill Lynch, presided over a workshop session dedicated to evaluating the current clearing and settlement problems and initiating their resolution. Mr. Hammerman acknowledged that while the obstacles to harmonizing the back offices of the various exchanges and financial intermediaries around the world are formidable, they are not insoluble. He emphasized that they must be addressed immediately. The ideal solution of creating a worldwide clearing and settlement organization is generally deemed impractical, at least at the present time. Therefore the most logical approach is to build linkages among the clearing and settlement systems that presently exist and having those organizations guarantee the performance of their members. The creation of global standards for certain aspects of the process is also vital.

The severity of the financial community's concern is evidenced by the number of initiatives, like Mr. Hammerman and IOSCO's, now being undertaken. Unfortunately, lack of coordination has cost us significant progress. There is a growing consensus that a back-office crisis of global proportions must be averted at all cost. But if we are to conquer the quagmire of conflicting regulations and antiquated technology that is the crux of the clearing and settlement problem, these individual initiatives must be forged into one comprehensive movement. Cooperation, once a nicety, is now a necessity.

Senator RIEGLE. Let me move back to our discussion here on this whole question of where we draw the boundary lines or move the boundary lines between different kinds of businesses if we erase Glass-Steagall or the Bank Holding Company Act.

Mr. Mendoza, I won't quote you precisely, but the thrust of what you said a minute ago in response to a question was that the real virtue of the expansion of bank powers is in the integration; you have, in a sense, sort of a broad line of activities.

The problem that I hear some express and that I think is an issue we have to deal with is the very integration itself raises some of the difficulties. It raises some of the difficulties in terms of not just the underlying Federal deposit insurance. We haven't talked about access to the Fed window and the multiplication of reserves and the whole meaning that that has, too.

But, let's suppose you can somehow get an iron separation, a firewall or whatever, that keeps those Federal assistance measures sealed off in just the banking entity.

If you have a broad-gauged company and they're working in terms of separate affiliates, to get the integration that you talk about, to be able to move back and forth across a band of products and services, to be able to move your customer from one window to the next window is where some of the advantages of having a broadened system are.

On the other hand, there are many people that say that's precisely the defect in the broader system. You don't want the person whose got to have a commercial lending relationship being strong-armed into having to buy the investment banking services or the life insurance services, or something else.

So you run into that problem. So, what I have heard said, even in some of the things that are in Senator Proxmire's proposal, as I understand it, deal with specific limits on concentration, which is sort of a different issue, saying that we don't want too few, that would be too big. So there would be limitations there.

It would be a clearly functional regulation and probably, therefore, more regulation because you'd be having regulation compartment by compartment.

But there's a cost to that. And that cost eventually has to spill back on somebody. And I would assume it would fall back on the entities in the bank holding company.

So there is that cost there as well. I think there would have to be some kind of super-regulatory body that John Heimann speaks about. We haven't quite gotten that into focus. But there's a cost, not just a cost in money, but a cost in time and a cost in effort, and so forth.

I would think as well that we would find that there would probably be penalties if we found there was an abuse of tie-in relationships. I think there would be a big hammer in any Federal law that would come down and hit very hard. And that can happen sometimes by accident, sometimes by deliberate purpose. But, in any event, I think we would probably find it would be in any kind of a package.

So I'm wondering, given that overlay of the question on how you keep clean separations and don't have a leakage of assets and so forth, how do you still get the virtues of integration?

That's one of the mysteries that's still not clear to me.

Mr. MENDOZA. Senator Riegle, again, that's a very complex question. Perhaps I did not express my viewpoint on integration as clearly as I should have.

The integration point that I was referring to and trying to describe in my testimony was as between securities activities. The situation that we have now is commercial banks are permitted to engage in most securities underwriting activities.

They can engage abroad in underwriting anything and in the United States, they can engage in underwriting way in excess of 90 percent of all securities that are issued.

That's mostly as a result of the U.S. Government debt. The integration is between all of those activities and the two activities which they're not permitted to engage in, which is corporate securities underwriting for debt and equity.

So that integration was what I was referring to and where I believe the efficiencies exist.

The second issue that would then flow from that is would integration of securities underwriting activities and traditionally defined commercial banking functions pose special risks?

Senator RIEGLE. May I just say one thing to you?

What may happen if that additional step is taken, what may go along with that is the view that says you need a very tough firewall. The firewall, which may not even be there now, may get established and may be moved back to pick up some activities that are already going on.

I don't know if you thought about that, but if there's a firewall that's going to go in, I can assure you it's going to be real.

Mr. MENDOZA. We have. And we think that that is the way it goes. That's perfectly fine. There is no problem with that.

INTEGRATION ISSUE

However, if I might, let me just comment on the broader integration issue, even though I realize this may not be the direction in which you are heading. The issue of tie-ins between traditional commercial banking functions and securities underwriting rests on the premise that commercial banks have some sort of special relationship with their clients that gives them undue influence or power.

Commercial banks today because of one fundamental change, the disintermediation of the lending function, are really in their traditional functions suppliers of a commodity and have no influence at all on their clients.

They deal at a very junior level with their clients in terms of the lending function. And their clients are faced with such a plethora of commodity-type competitors that they are not reliant on that function.

So, even though the firewall you might establish might limit the efficiencies to those between securities activities, I personally would not be bothered by the complete integration because I don't think that the premise holds true in today's markets, though it might have done 50 years ago.

Senator RIEGLE. Notwithstanding the comments of the Senator from Nebraska earlier, I think that may vary depending on where you are in the country—urban, rural.

Mr. MENDOZA. I would agree with both of you and I think there is a general concensus here that there are different kinds of banks that maybe ought to be in different businesses, and perhaps regulated in different ways with respect to the points that you made.

In addition, on the concentration issue, we would clearly support measures that would prevent undue concentrations. We happen to believe that the existing antitrust legislation would achieve that. But, if it doesn't, that's fine.

The functional regulation question is not an incremental burden. Functional regulation exists in the American Express example; they have functional regulation of each of these activities.

So, again, we would be happy with that. And we'd be happy with whatever holding company oversight regulation is needed.

The tie-in point I think is all providers of services are subject to antitie-in legislation. You're not allowed to tie, whether you're a commercial bank, a securities firm, consulting firm, or anybody else.

Commercial banks, in addition to that, have got a more stringent and specific tie-in prohibition under the Bank Holding Company Act. So, commercial banks are already subjected to a more stringent, antitie-in provision than anybody else. And it's specific to commercial banks.

I think that's it. Thank you.

The CHAIRMAN. Senator Karnes.

Senator KARNES. Thank you. Just one question.

Following up on Senator Riegle's question, he made certain assumptions which I think you must make in order to propose a number of questions. But the substance was that we could put a firewall together and it would be indeed identifiable and understandable, I guess, to the industry.

The threshold question to me acknowledging the diversification and dynamics that we're seeing in the marketplace today, can we put something together that would accomplish the separation and allow for the functional regulation that all of us talk about here so much in a fashion that would allow all of the institutions that are seeking this expanded power to fully take advantage of the opportunity.

I guess, in my mind, that's the question. Everybody assumes that we can do this. And I believe possibly we can. I don't know what that firewall would look like. Apparently, we're making a distinction between what had been a Chinese wall and now it's going to be a firewall.

So I think there's more substance there in some fashion. But, in your minds, do you believe that we can put something together that would be meaningful and allow the institutions that are seeking these expanded opportunities to take the full opportunity?

Mr. MENDOZA. Senator Karnes, absolutely, I do believe that we can do so. The history of the regulatory process since the passage of the 1933 legislation indicates that it is possible to do it. We have a number of organizations operating today in this country, such as American Express, that are already subject to such a regulation.

So I think we can do it. The answer is yes.

Senator KARNES. Correct me if I'm wrong. American Express is not dealing with a bank holding company. Are they operating as a bank holding company?

Mr. MENDOZA. They are not. That is the point that John was referring to. I don't know whether he feels that American Express ought to be regulated, but they own, as I mentioned, two life insurance companies—a property and casualty company, a bank and a securities firm.

Each of those entities is regulated.

Senator KARNES. As Senator Riegle suggests, we may need something to identify this as a particular type of financial institution vehicle.

Mr. HEIMANN. I'd like to just make a couple of comments because I do believe you can regulate functionally and make it work, whether it's with a firewall or a Chinese wall. I do think that's possible if the Congress recognizes certain principle.

One, there has to be somebody who sees over the whole structure. I keep coming back to that because my experience as a regulator, both at the State and on a national basis, is that there are a lot of characters out there who can figure out ways to get around things. The trick is to catch them. And you have to have the tools to catch them. You cannot do it on a piecemeal basis.

So I think it can be done, but there will be accidents in the beginning. Mistakes will be made. There will be people who try things that will be shocking and everyone will be upset by it. More likely than not, the regulator will get picked on because he didn't catch them.

I would also like to come back to something Senator Riegle said a minute ago. That is, I think the question that you have to answer here—it's part of yours, Senator Karnes—is, are banks special or are they not?

I think you have to look at some of the work that Jerry Corrigan, President of the Federal Reserve Bank of New York, has done in terms of this; because Bob Mendoza made the statement correctly, that this relationship between the banks and their competitive corporate clients has changed dramatically over these years. That's absolutely correct. Disintermediation of the commercial banking system proved it beyond the shadow of a doubt.

The question really is though for the country as a whole, for the national interest, what is the role of commercial banking? What is its role in the payment system? What does that really mean?

Commercial banks have historically been deemed to be the lenders of next to the last resort. I think that has to come into this calculus of what you want to do about the individual segments.

But I do agree with Mr. Mendoza that we can regulate, that we could construct a firewall. But when something goes awry, which it will somewhere, somehow, the question will be whether the parent feels it has to stand behind it, even though the law doesn't require that. And that will be the first real test of this whole system. And I'd have no answer to that.

Senator KARNES. Professor Levich.

Mr. LEVICH. Just to add to these remarks, I think that the safeguards that are needed to protect investors and participants in the

system would be a huge amount of information disclosure, so that both regulators and investors and the different entities can understand what's going on, both on the balance sheet and off the balance sheet, so they can make informed choices.

And if we do have a firewall that separates commercial banking activities, traditional commercial banking activities from other activities, that the regulatory system is such that securities affiliates are permitted to fail and that banks with access to the Federal Reserve window are permitted to use that. That institutions can fail, but the system itself is kept solid.

Senator KARNES. I'm hoping by doing this that the investors or consumers don't need to bring their corporate counsel with them to understand the fine print.

Disclosure is great as long as people understand it.

The CHAIRMAN. Senator Graham.

Senator GRAHAM. Thank you, Mr. Chairman.

Reference was just made to Mr. Corrigan's proposal. Some of us have been very intrigued with that as a beginning point for a comprehensive look at restructuring financial institutions.

I'd be interested in your comments, if you have any, on Mr. Corrigan's recommendations, particularly as they relate to the subject of this hearing, but also more generally as to its usefulness as a point of departure for financial institution revisions.

Professor?

COMMENTS ON CORRIGAN REPORT

Mr. LEVICH. With respect to Mr. Corrigan's writing on internationalization of markets and the need to reform the system, one point that he has made, I believe, protection, so it would be a firewall and the payment system would be difficult to design.

So I think I'm sensitive to that point. I think it would be difficult to design. But I think it would be possible to design effectively. And that the feasibility and the operability of the system really depends in part, in large part, on the ability of regulators to do some of the jobs, tough jobs, that they're asked to do, which is to close insolvent institutions before they go running into the incredible FSLIC type problems where losses are allowed to mount and mount.

So I think, in principle, the design of the system that's being talked about is possible, although difficult. And that it will be demanding on regulators, policymakers to implement both because it has international dimensions, which have to be coordinated across country, so it's not the kind of regulatory arbitrage that's been put forward but it's going to be demanding in the next dimension.

When the institutions become insolvent, they're going to have to be closed earlier rather than later; in knowledge that the regulators will impose that sort of discipline, that will be an additional force besides the market discipline to make sure that the abuses and the excesses that people are imagining and have happened are not going to be a life-threatening problem in the future.

Mr. HEIMANN. I think, first of all, one interesting development during these hearings so far is now everybody accepts there is a need for a firewall. That means that everybody is worried about a fire.

If you're worried about fire, it seems to me you have to have a fire department somewhere. I guess that's the point I've been trying to make throughout all this.

But let me come to your comments. I think President Corrigan's report is a superb starting point. It's probably the most comprehensive body of work on the subject of changing the financial system that we have available to us. And it's been very well thought out in my view.

I personally do not agree with all of it. And I would suspect that my colleagues at the table would not agree with every one of his recommendations.

He doesn't, for example, address the issue of Federal deposit insurance. So it's not comprehensive in the sense that it covers all of the bases and all of the fundamentals. But I do think it's an excellent place to start a dialog on change.

If I understood your question, Senator, I agree with that very much.

Senator GRAHAM. Mr. Mendoza.

Mr. MENDOZA. I also think it's a superb document very carefully crafted and well thoughtout.

There are two points that strike me as being the most salient. He takes the view that financial services need to be integrated and, second, he takes the view that we need to preserve the separation of banking and commerce, which I recognize is not a subject that we want to enter into today, but that is an issue on which there are strongly held views.

Senator GRAHAM. I'm now speaking as a politician, a neophyte one in this institution. But my experience has been that when major change occurred, it generally was because the people affected by the system as distinct from those who were the providers of the system became dissatisfied with the status quo and became, in fact, an effective force for change.

Mr. Heimann, in your statement, you draw the conclusion that the structure of the world's financial system is being rerationalized to meet the needs of its users, which infers that the users have become an effective force in that regard.

I've been concerned that I haven't seen the users of the financial services system, which would include private users, corporations, governmental users, State and local government, specific areas such as the housing industry get particularly involved in the kinds of questions that you've been discussing, and which will be necessary for the larger critical mass of change that you have all spoken that is to be necessary.

BENEFITS TO USERS

I'd be interested, Mr. Heimann, in looking at what ways have the users been benefited in rerationalizing the world's financial system and what does that say about their involvement in rerationalizing our U.S. financial institution structures.

Mr. HEIMANN. Thank you, Senator.

I think perhaps the point that Mr. Mendoza made a few minutes ago might be the best description of how the users are one. We have two sides of users of the financial system—those who use it to

raise money, issuers of securities, whether they borrow through a bank or sell securities; and the other side are the takers, those who invest in those securities.

But, most important are the users, what we call the consumers of financial services, which would be the public broadly across the world.

The most dramatic example of how the users have changed the system, particularly in the United States, was the one I think was alluded to by Mr. Mendoza, regarding the disintermediation of the commercial banking system.

To put it another way, the highest rated, best credit quality customers of the banking system in the United States and the world have left the commercial banks—I hope I'm not being too dramatic about this—to go into the capital markets.

After all, if you're an AAA corporation, why would you borrow money from an AA rated bank?

It doesn't make a heck of a lot of sense. We only have one AAA banking organization in the United States, and Mr. Mendoza is a senior officer of that exclusive organization.

The commercial paper market probably is the best example of that, having grown from less than $50 billion 5, 7, 10 years ago, to over $360 billion today. What was traditionally a commercial bank business has gone to the capital markets.

The other side of that, for example, is the success of the cash management account at Merrill Lynch, with 1,250,000 customers, all of whom are using that service for the most part in lieu of traditional commercial banking-like services that they would have used. This change was driven by consumers. They wanted it and they got it, the same way large corporations want access to the capital markets.

I think the problem that you're struggling with is that we're dealing with a rather arcane subject. There's plenty of competition in the financial services industry in the United States. The consumer feel that they're fairly well taken care of and treated. And, in fact, indeed, they are.

The last time we had a revolution was over regulation Q, which was in many ways an outrage and stood on the books for many, many years until the older citizens of this country got themselves together so they could get a competitive rate of return on their deposits.

And they marched on the halls of the Congress and got that change in regulation Q, because a lot of people felt they were really not being fairly treated because of that.

What concerns me the most is that we will wait for some crisis before we rationalize the system, when it is so apparently clear to all parties that something is wrong. We will then go and restructure the financial services industry under the worst possible circumstances.

That's why I so admire what this committee is attempting to do, and that is to restructure before a crisis. A crisis always hits; history shows us that.

I'm not smart enough and nobody else is to know when or how, but that it will occur is a given.

So, the question is whether or not the Congress of the United States can be a compass rather than a weather vane. I hope it can and is.

Senator GRAHAM. Thank you.

The CHAIRMAN. Thank you, Senator Graham.

I'm surprised by the notion that we would even think of repealing deposit insurance. That's one way of getting the small banks in the country concerned, raising the specter of them losing their deposit insurance. No possible way the Congress would repeal deposit insurance; its here to stay.

Since I've been here, we've had one increase after another in the coverage of deposit insurance. I'm old enough to remember when it was $5,000. Now it's $100,000.

The only debate is whether we're going to insure all deposits, which we're not going to do. But that's not an issue here.

In the second place, we have the issue of the so-called firewall or Chinese wall, Mr. Mendoza, I remember going down to Morgan Stanley and asking for a job back in 1940 and being turned down. So I went to J.P. Morgan and got a job.

I assumed at the time that Morgan Bank and Morgan Stanley were affiliated because of the common name. Obviously, that assumption was not legally correct even though the two institutions did seem to enjoy a close working relationships.

Why isn't that kind of a arrangement still desirable?

Mr. MENDOZA. First of all, Senator Proxmire, I'm very pleased that my antecedents at J.P. Morgan Company made the wise decision that they did. [Laughter.]

I think that the answer is that the system, the way we have it now, simply isn't working. Perhaps I'll get back to the point that Senator Graham made about what are the users doing.

One of the things they're doing is they're voting with their feet. They're going to London. Next they'll go to Tokyo.

My answer to your question would be that the most effective of all Chinese walls, which is complete separation, is simply leading to inefficiency.

While I would want to be completely frank about our own self-interest here—not that anybody's under any illusions that we are motivated by self-interest, as are all of the firms in this debate—from the public policy perspective, we believe that with respect to the competitiveness of American firms generally and the competitiveness of American capital markets, they can only be enhanced if the restrictions are eliminated.

The CHAIRMAN. Professor Levich, I'd like you to comment on Mr. Mendoza's observation U.S. banks have gone overseas and have been able to conduct good operations efficiently.

COMMERCIAL BANKS AND OVERSEAS OPERATIONS

Have U.S. commercial banks conducted their overseas underwriting operations safely? Are you aware of major problems involving conflict of interest or other abuses by our banks operating overseas as underwriters?

Mr. LEVICH. I'm not aware of any problems.

The CHAIRMAN. You believe that that's been a success as far as safety and soundness conflict of interest are concerned?

Mr. LEVICH. Yes. I believe you can find participants in that market from United States who have gone to London and been unsuccessful and closed down their operations and come back without threatening their U.S. based banking systems.

But, for the most part, U.S. commercial banks have set up securities affiliates in London and been fairly successful.

The CHAIRMAN. Mr. Mendoza, only a small proportion of the debt underwriting in the United States takes place through competitive bidding. That bothers me. Do you think that competitive bidding would increase if Glass-Steagall were repealed?

Mr. MENDOZA. Yes, sir.

The CHAIRMAN. To what extent?

Mr. MENDOZA. An enormous extent.

The CHAIRMAN. Do you think it would be the general rule?

Mr. MENDOZA. In terms of volume, yes. And we have a very good case history which Professor Levich has referred to, which is what happened in the Eurobond market. In the Eurobond market there used to be traditional fixed price syndicates where issues were brought to an underwriter on a relationship rather than competitive basis. Borrowers were associated with particular firms, and coincidental with the increasing involvement of, among others, U.S. commercial banks in the Euromarket, you started seeing competitive bids in the Euromarket.

And now, though I don't have statistics in front of me to support it, I think that John would probably agree that competitive bidding is even more prevalent in the Euromarkets than it is in domestic markets.

But I think it's also fair to point out that it is increasing rapidly in the domestic markets as a result of 415 registrations.

The CHAIRMAN. Mr. Mendoza.

Mr. MENDOZA. Mr. Chairman, I would make another point, that I would be very much interested in Mr. Heimann's research also into the equity area because I think the incidence of competitive bidding in the equity area is probably very low.

The CHAIRMAN. I'll tell you. Why don't both of you gentlemen submit to the committee for the record your varying statistics, so we can compare them?

Mr. HEIMANN. Mr. Chairman, Mr. Mendoza just shot me a zinger. [Laughter.]

The CHAIRMAN. I missed that?

Mr. HEIMANN. He shot me a zinger on the equity business. There are differences, that's clearly correct. But we'll submit that for the record with the explanation as to what differences exist, sir.

Mr. MENDOZA. I didn't mean to shoot Mr. Heimann a zinger.

The CHAIRMAN. I'm trying to promote that kind of interaction. [Laughter.]

Mr. MENDOZA. But, while we're in the zinger area, I think that we would both agree that the underwriting of equity securities is significantly more profitable than the underwriting of high grade corporate debt.

One of the reasons is that there is a noticeable absence of competitive bidding, which I think would increase with the entrance of more qualified participants.

Mr. HEIMANN. Mr. Chairman, it is noticeably more profitable because it is noticeably more risky, a higher, far greater risk component in the distribution area.

The CHAIRMAN. Give us the evidence on risk.

Mr. Mendoza made the very good point that underwriting is only for a period of 2 or 3 days very often. It's not like having your capital tied up for 10 or 15 years.

Mr. HEIMANN. I think that's absolutely correct.

The CHAIRMAN. Do you want to make one more rejoinder? [Laughter.]

Mr. HEIMANN. I've been pulling the whole time.

Mr. MENDOZA. I'm mortified to think I might not have been polite. I would never dream of consciously not being so. But while we're in the zinger area . . . [Laughter.]

A publication was put out called "Rethinking Glass-Steagall by an interested party," which examined the historical profitability of the equity underwriting business. And there is, in fact, overwhelming evidence to suggest that the underwriting of equity securities has been extremely safe and highly profitable for a long, long period of time.

There is no historical data in my view to support the thesis that it is risky.

The CHAIRMAN. Will you supply that for the record?

Mr. MENDOZA. Yes, sir.

[The following material was subsequently submitted for the record:]

Morgan Guaranty Trust Company of New York 23 Wall Street, New York, NY 10015

Roberto G. Mendoza
Executive Vice President

The
Morgan
Bank

October 30, 1987

The Honorable William Proxmire
530 Dirksen Senate Office Building
Washington, D.C. 20510-4901

Dear Senator Proxmire:

Enclosed you will find the additional information that you and Senator Riegle requested following my testimony before the Senate Banking Committee on October 13.

Although my testimony was directed at the implications of the Glass-Steagall Act for international markets, where money center banks are most active, I would like to take this opportunity to note that smaller banks also have an important stake in a revision of the Act. Expanded securities powers, for example, would permit small and regional banks to offer their retail customers mutual funds and full-service brokerage. Expanded powers would also permit banks across the country to underwrite a full range of revenue bonds for state and local governments. If permitted to underwrite corporate securities, there is every reason to believe that mid-sized banks would use the skills they have already developed in underwriting general obligation and eligible revenue bonds to underwrite securities issues for local businesses. In the past few years, the number of regional securities firms has declined steadily while underwriting has become increasingly concentrated in large securities firms. A revision of Glass-Steagall would permit small and regional banks to bring this business back to their local communities.

Some of the discussion following my prepared remarks at your hearing centered upon the apparent success of Japanese banks and securities firms despite Article 65, the Japanese version of the Glass-Steagall Act. In addition to my comments at the hearing, I would like to point out that the divorce of banks and securities firms is not as complete in Japan as in the U.S. Japanese banks and some of their related companies hold significant stakes in securities firms and in many instances senior bank officers apparently have been seconded to such firms.

Moreover, Japanese banks and securities firms operate from a highly protected domestic market. Fixed brokerage commissions, from which Japanese securities firms obtain about 50% of their revenues, constitute one of their advantages. The Ministry of Finance's rules that restrict foreign financial firms to very small allocations in underwriting Japanese government bonds also serve to shelter Japanese financial firms from competition. The interest rate ceilings that remain on approximately 80% of bank deposits in Japan, meanwhile, continue to provide Japanese banks with a source of low cost funding that is not available to banks based in countries with deregulated banking markets. Factors such as these serve to bolster the strength of Japanese banks and securities firms in both domestic Japanese and international markets. As a result, they have become major competitors as evidenced by their high standing in the rankings of international securities and banking firms.

You should note, however, that the Japanese government has also taken steps which we applaud to reform their domestic markets and enhance competition. Among other measures, they have recently begun to allow foreign banking organizations like J.P. Morgan to organize joint ventures to engage in full-scale underwriting and dealing in securities in domestic Japanese markets. We believe that when it appears advantageous for them to do so Japanese regulators will move quickly to take further steps to dismantle Article 65 in its entirety.

Sincerely,

Roberto Mendoza

cc: Senator Donald W. Riegle, Jr.
bcc: Edward M. Malan

ADDITIONAL INFORMATION REQUESTED
BY SENATOR PROXMIRE FROM MR. MENDOZA

The Riskiness of Equity Underwriting

In a typical equity underwriting, an underwriter or syndicate agrees to buy a new equity issue from a firm at a fixed purchase price and to sell the issue to investors for no more than an agreed-upon offer price. The difference between the purchase price and the offer price -- the spread -- constitutes the main remuneration to the underwriter. Typically, these spreads range from 4 to 6 percent of the issue price. The underwriter runs the risk, however, that investors may be unwilling to buy the securities at the offer price. If the price that investors are willing to pay falls short of the offer price but still exceeds the purchase price, the underwriter still makes a profit, albeit a smaller one than expected. If investors are only willing to buy the securities at a price below what the underwriter has agreed to pay the issuer, the underwriter incurs a loss.

To determine the riskiness of equity underwriting, Professor Ian Giddy of New York University examined 2,540 equity issues underwritten between 1976 and 1983. Professor Giddy estimated that underwriting profits far exceeded losses: On average, underwriters made more than $1 million per issue (the mean issue size was $35 million). (Table 1)[1] If the underwriters sold the

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[1]As no public data are available on the actual prices at which equities are sold to investors by underwriters, Prof. Giddy assumed that if the market price of the stock was above the offer price, the issue was sold at the offer price, but if the market price was below the offer price, the underwriter had to sell the stock at the (lower) market price. This assumption overestimates any losses that underwriters actually may have incurred. In cases where the market price was below the offer price, some

(Footnote Continued)

issue within one day of the offering day -- which they usually do -- they would have lost money in only 96 issues (less than 4% of the issues studied). If the underwriters had been unable to place the issues until the fifth day following the offering day, they would still have incurred losses on only 283 issues (just over 11%).

Perhaps a more accurate indicator of the limited risk of this activity is the estimate of total losses incurred on the underwriting of the issues studied. As Table 1 shows, underwriters' losses averaged only 0.11 percent of the value of the issue, if they sold the issue within one day of the offering day (which they usually do). Even if they had waited until the fifth day following the offering day, the underwriters would have lost on average only 0.35 percent of the face value of the issue.

(Footnote Continued)
portion or all of the issue may nevertheless have been sold at the offer price. See Ian Giddy, "Is Equity Underwriting Risky for Commercial Bank Affiliates?", in Ingo Walter (Ed.), Deregulating Wall Street, John Wiley & Sons (1985), Chapter 6.

Table 1: Gains and Losses to Equity Underwriters
(1976-83, $ millions)

	Gain/Losses assuming issue was sold on the		
	First Day After Issue	Fifth Day After Issue	Tenth Day After Issue
Average	$1.28	$1.14	$1.12
St. Deviation	1.83	2.03	2.09
Range	-10.35 to 25.58	-18.72 to 25.58	-13.84 to 25.58
Number of			
Net gains	2,439	2,254	2,226
Net breakevens	5	3	3
Net losses	96	283	311
Total	2,540	2,540	2,540
Total Gains	$3,150	$2,575	$2,430
Total losses	$ 100	$ 320	$ 413
Total face value of the issues	$90,194	$90,194	$90,194
Total losses as % of face value	0.11%	0.35%	0.46%

Note: The mean issue size was $35 million. "Net" means the price at which the underwriter was able to sell (lower of market or offer price) minus the purchase price. Most issues are sold by the first day following the offering day. Data for the fifth and the tenth day are provided for comparison only.

Source: Ian Giddy, "Is Equity Underwriting Risky for Commercial Bank Affiliates?", in Ingo Walter (Ed.), Deregulating Wall Street, John Wiley & Sons (1985), Chapter 6, and Rethinking Glass-Steagall, J.P. Morgan & Co., 1984, 15-18.

For comparison purposes Table 2 presents annual net loan loss rates on commercial and industrial loans at FDIC insured banks over the last five years. To compare the loan loss rates with loss rates on equity underwriting one has to take into account that the loan loss rate measures an annual loss, while the underwriting loss rate concerns a once-and-for-all loss. A bank that makes a loan to a customer, as opposed to underwriting an equity issue, incurs the expected annual loss rate in each and every year that the loan is outstanding. With an average maturity on medium-to long-term loans of more than four years,[2] a 1.06 percent annual loan loss rate translates into an expected loss of 4.2 percent over the life of a typical loan portfolio, much higher than an expected loss rate of 0.11 percent on equity underwriting.

Underwriting an equity issue is less risky than making a commercial loan because the underwriter holds on to the security for at most a few days and then transfers the risk to investors. Moreover, prior to the offer date, a number of institutional investors will usually have indicated already that they intend to buy the issue at the offer price at the offer date. A bank that makes a loan incurs default risk over the full life of the loan.

While we are aware that in the recent British Petroleum equity offering underwriters face substantial losses, the form of underwriting employed in that transaction, with a commitment period of several weeks, is highly unusual in the United States.[3] In this country, underwriters usually purchase

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[2]See Federal Reserve Statistical Release E.2: Survey of Terms of Bank Lending.

[3]Long commitment periods are used in markets where underwriters presell parts of the issue to institutional investors prior to the issue date.

securities for immediate resale and protect themselves with covenants that allow them to withdraw in unusual market circumstances.

Table 2: Net Charge-off Rates at FDIC insured Banks

1982:	0.74%
1983:	0.99
1984:	1.14
1985:	1.18
1986:	1.27
Average 1982-86:	1.06

Source: Banking and Economic Review, Federal Deposit Insurance Corporation, July/August 1987, Table 2.

Securities Offerings are Rarely Done on a Competitive Basis

As Table 1 shows, over the last three years out of 2,507 equity issues, only five were underwritten on a competitive auction basis. In the market for convertible debt, not one issue was underwritten on a formal competitive bid basis (Table 2).

Competitive bids were less rare in the market for non-convertible debt, though the vast majority of all issues was done on a negotiated basis: 162 issues out of a total of 3,009 were underwritten competitively during the last three years (Table 3). Negotiated issues accounted for more than 96 percent of the dollar value of all non-convertible debt issues.

In the market for municipal bonds and notes, competitive issues are much more common: over the last three years, 20 percent of the value of these securities was issued on this basis (Table 4). Most competitive issues, however, are general obligation issues that banks are eligible to underwrite: in this market, seven out of ten issues (and 47 percent of their value) are underwritten on a competitive bid basis (Table 5). In comparison, competitive issues are much less common among municipal revenue bonds and notes, which banks for the most part are not allowed to underwrite: more than 90 percent of the value of these securities are underwritten on a negotiated basis (Table 6).

A note of caution is necessary in interpreting these data. The data in the tables on competitive issues refer to issues that were the subject of a formal competitive auction among different underwriters. In recent years, however, some issuers with 415 shelf registrations have chosen a single underwriter only after informally inviting bids from a number of underwriters. It should also be noted that competitive bids are most frequently used in connection with routine offerings of standard securities under ordinary market conditions. Issues that involve innovative features or complex structures may be less suited to a competitive bid process.

Table 1: Common Equity

Issues	Negotiated	Competitive	Total
1984	562	1	563
1985	744	1	745
1986	1,196	3	1,199
1984-86	2,502	5	2,507

Amount ($ mils)	Negotiated	Competitive	Total
1984	$ 9,133.0	$ 24.2	$ 9,157.3
1985	24,671.0	56.4	24,727.4
1986	42,821.7	217.0	43,041.3
1984-86	76,625.8	297.6	76,926.0

Amount (percent)	Negotiated	Competitive	Total
1984	99.7%	0.3%	100%
1985	99.8	0.2	100
1986	99.5	0.5	100
1984-86	99.6	0.4	100

Source: IDD Information Services

Table 2: Convertible Debt

Issues	Negotiated	Competitive	Total
1984	66	0	66
1985	137	0	137
1986	207	0	207
1984-86	410	0	410

Amount ($ mils)	Negotiated	Competitive	Total
1984	$ 4,076.7	$ 0	$ 4,076.7
1985	7,426.4	0	7,427.4
1986	10,115.9	0	10,115.9
1984-86	21,619.0	0	21,619.0

Amount (percent)	Negotiated	Competitive	Total
1984	100.0%	0.0%	100%
1985	100.0	0.0	100
1986	100.0	0.0	100
1984-86	100.0	0.0	100

Source: IDD Information Services

Table 3: Non-Convertible Debt

Issues	Negotiated	Competitive	Total
1984	564	18	582
1985	866	42	908
1986	1,417	102	1,519
1984-86	2,847	162	3,009

Amount ($ mils)	Negotiated	Competitive	Total
1984	$ 64,021.8	$ 1,250.0	$ 65,271.9
1985	94,943.8	2,656.4	97,600.1
1986	209,023.4	10,075.5	219,099.4
1984-86	367,989.4	13,982.0	381,971.4

Amount (percent)	Negotiated	Competitive	Total
1984	98.1%	1.9%	100%
1985	97.3	2.7	100
1986	95.4	4.6	100
1984-86	96.3	3.7	100

Source: IDD Information Services

Table 4: All Municipal Bonds and Notes

Issues	Negotiated	Competitive	Total
1984	4,942	4,872	9,814
1985	7,839	5,251	13,090
1986	4,240	4,924	9.164
1984-86	17,021	15,047	32,068

Amount ($ mils)	Negotiated	Competitive	Total
1984	$ 97,485.1	$ 29,550.1	$127,035.2
1985	196,430.7	39,381.0	235,811.8
1986	129,668.0	40,214.8	169,882.6
1984-86	423,583.8	109,145.9	532,729.6

Amount (percent)	Negotiated	Competitive	Total
1984	76.7%	23.3%	100%
1985	83.3	16.7	100
1986	76.3	23.7	100
1984-86	79.5	20.5	100

Source: IDD Information Services

Table 5: General Obligation Municipal Issues

Issues	Negotiated	Competitive	Total
1984	1,156	2,830	3,986
1985	1,461	2,677	4,138
1986	1,345	3,929	5.274
1984-86	3,962	9,436	13,398

Amount ($ mils)	Negotiated	Competitive	Total
1984	$ 17,160.4	$19,971.6	$ 37,132.0
1985	33,521.7	24,195.1	57,716.7
1986	32,476.4	28,462.6	60,939.0
1984-86	83,158.5	72,629.3	155,787.8

Amount (percent)	Negotiated	Competitive	Total
1984	46.2%	53.8%	100%
1985	58.1	41.9	100
1986	53.3	46.7	100
1984-86	53.4	46.6	100

Source: IDD Information Services

Table 6: Municipal Revenue Issues

Issues	Negotiated	Competitive	Total
1984	3,786	2,042	5,293
1985	6,378	2.574	8,280
1986	2,895	995	3,890
1984-86	13,059	5,611	17,463

Amount ($ mils)	Negotiated	Competitive	Total
1984	$ 80,324.7	$ 9,578.5	$ 89,903.2
1985	162,909.0	15,186.0	178,095.0
1986	97,191.5	11,752.2	108,943.7
1984-86	340,425.2	36,516.6	376,941.9

Amount (percent)	Negotiated	Competitive	Total
1984	89.4%	10.6%	100%
1985	91.5	8.5	100
1986	89.2	10.8	100
1984-86	90.3	9.7	100

Source: IDD Information Services

Comparison of Issuing Costs in Negotiated and Competitive Offerings

A number of academic studies have shown that equity offerings where the issuer invites competitive bids from several underwriters involve lower flotation costs to the issuer than those where issuers negotiate with a single underwriter.[4] A study published in 1986 examined a sample of 552 equity offerings by public utilities between 1973 and 1980 in which 73 were competitively bid and 479 were negotiated.[5] The study found that issue costs for firms that use negotiated offerings were higher by 1.3 percent as a fraction of the value of the issue. With a mean issue size of $47 million, the issuers saved on average $610,000 by using a competitive offering instead of a negotiated offering.

An earlier study, published in 1978, found that for a sample of 122 utility equity issues from 1963 and 1974, underwriting commissions for negotiated offerings were 1.2 percent higher than those for competitive bids.[6]

The same holds true for debt issues. An article published in 1976 examined 1,081 issues of public utility and industrial bond offerings between 1964 and 1971. The author found that

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[4]For a summary, see Clifford W. Smith, "Investment Banking and the Capital Acquisition Process," Journal of Financial Economics 15 (1986), 3-29.

[5]Bhagat, Sanjai and Peter A. Frost, "Issuing Costs to Existing Shareholders in Competitive and Negotiated Underwritten Public Utility Equity Offerings," Journal of Financial Economics (1986), 233-259.

[6]Logue, Dennis E. and Robert A. Jarrow, "Negotiation vs. Competitive Bidding in the Sale of Securities by Public Utilities," Financial Management (1978), 31-39.

borrowing costs on negotiated debt issues were seven to eight basis points higher than the borrowing cost on equivalent competitive bid issues offered at the same time.[7]

A second study of debt issues examined a sample of 71 competitive bids and 312 negotiated new issues of debt by public utilities between 1972 and 1974. That study found that underwriters' commissions were 0.13 percent higher (as a fraction of proceeds) and the borrowing cost on the debt was 36 basis points higher for negotiated than for competitive bids.[8]

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[7]Ederington, Louis, "Negotiated versus Competitive Underwritings of Corporate Bonds," Journal of Finance (1976), 17-28.

[8]Dyl, Edward and Michael Joehnk, "Competitive versus Negotiated Underwriting of Public Utility Debt," Bell Journal of Economics (1976), 680-689.

Remarks of Dennis Weatherstone, President, J.P. Morgan & Co. Incorporated, on "Settlement Risk and the Evolving Competitive and Regulatory Environment," at the International Monetary Conference, Hamburg, West Germany, June 23, 1987

Risk today has so many dimensions that it gives entirely new meaning to one of the banker's key traditional roles, that of risk manager. In our brave new financial world, huge volumes of transactions race around the globe at high speed through an endless trading day. That unbroken stream of transactions generates not only settlement risks, but market, counterparty, and credit risks -- in familiar and unfamiliar forms.

The roles played by advances in technology and financial theory in creating this world are well known, if not always well understood. And we can only expect continuing brainstorms from the so-called "rocket scientists" -- those who actually understand the Black Scholes model! I have never sympathized with the view that the development of the new financial instruments is somehow unfortunate, if not a little bit evil. Swaps, options, and the whole array of the past decade's innovations serve a real economic need: they have expanded the universe of both financing and investment alternatives, and they

have made it possible for users and providers of funds to limit their exposure to risk. What's probably more important, from a practical point of view, is that the new instruments are here to stay.

That said, innovation and its manifestations in the securitized, globalized financial markets do raise some new concerns. Let me mention just a few to set the context for talking about settlement risk.

First, complex new instruments are being introduced at an unprecedented rate and widely used before the risks they carry can be understood or measured, much less managed. Clearly, you can't manage a risk you don't recognize.

Second, the explosion of transaction volume, and in particular the intricate linking of transactions to accomplish highly specific financial objectives, tends to complicate risk assessment and management. Each link in the transaction chain introduces a new obligation, counterparty, time element, and so on.

Just to dwell on payments volume for a moment, the size of flows through all major clearing systems is enormous. One reason is that foreign exchange volume in recent years has surged. In part, this has occurred as financial institutions

have recognized the profit potential of foreign exchange trading. In addition, foreign currency payments have become necessary companions to cross-border transactions involving many of the new financial instruments.

On an average day some 400,000 transactions representing $1.3 trillion are cleared through New York. On peak days, the dollar volume has climbed as high as $1.7 trillion. Looked at another way, in 1960 the daily dollar value of payments made through the Federal Reserve system equalled the daily reserve positions of the member banks. By 1985, the dollar value of payments had climbed to better than 30 times reserve balances.

Needless to say, this volume increase was not accompanied by equivalent improvements in the credit strength of the participants. And since dollar-based transactions generally must be settled in New York, it's important to recognize that a transaction initiated in Tokyo cannot be finally settled until the close of business in New York, as much as 18 hours later. Obviously, the longer it takes to settle a financial transaction, the greater the risk.

A third, related concern arises because of the many new participants in the markets, covering the spectrum of experience, skill, and capital strength. This increase in numbers is probably good in the sense that it fosters

competition, innovation, and liquidity. But it also adds risk for the participants and for the system. This is especially true to the extent that regulatory requirements differ -- for different kinds of market participants, as well as country to country.

Lastly, at the same time that we are experiencing increased volume, velocity, and volatility, there is a substantial time lag in the development of supporting infrastructure - settlement and clearing systems, regulatory structures and procedures, and the technological and people resources needed to process transactions. We now have a huge, complex, interlocking system of national and global markets, operating 24 hours a day, with settlement procedures for both cash and securities varying widely among markets, and provisions for managing risk -- and containing problems in the system if they do occur -- still in their infancy.

All of this suggests that the risks and consequences of failure in the settlement process have risen dramatically during the past decade. The risks in the system cannot be eliminated, but some can and should be reduced.

Fortunately, my task here is not to take on the entire complex of market, counterparty, and credit risks that can

arise. Focussing just on settlement risk, let me suggest four complementary approaches to help manage this risk more effectively.

First, in the money payments systems, more active management of cash flow positions should be encouraged to reduce intraday overdrafts;

Second, efforts should be made to reduce the cumulative settlement risks of 24-hour global trading by developing mechanisms that contain them geographically;

Third, in both the money and securities markets, netting arrangements should be encouraged wherever possible; and

Fourth, in the securities markets, substantial improvements in procedures for settling securities should be carried forward.

Let me expand on the first point, involving the large dollar payments system. Virtually all such payments are made through the Federal Reserve's Fedwire system or the CHIPS system of the New York Clearing House. Fedwire payments are final because they are guaranteed by the Fed, which assumes the risk of payment failure. CHIPS payments, on the other hand, are conditional -- that is, they are not final until settlement takes place at the end of the day in New York.

In a joint initiative to control the growth of settlement risk, both CHIPS and Fedwire last year instituted "caps" which placed limits on the total intraday overdrafts a participant can incur on either system. The Federal Reserve also has studied possible methods of imposing a charge for the risks it incurs in operating Fedwire. In turn, banks that would incur any such charges are considering whether and how they might pass them on to their customers. Some U.S. banks have indicated an interest in selling funds on an intraday basis.

What this suggests is that normal market forces may encourage developments that work to reduce settlement risk. Should we encourage such developments as a market for intraday funds? They are worth exploring, particularly if other measures, which I will come to in a moment, do not sufficiently alleviate the problem.

Now, let me turn your attention to the second approach, which is the design of our funds settlement systems themselves.

In a 24-hour, global trading environment, even daily settlement permits the buildup of large and potentially destabilizing exposures. It might be possible to devise a way to contain these risks through regional clearing mechanisms, in Europe and Asia, that would settle with finality all dollar

payments in their regions and not pass them around the world through the commercial banks for final settlement in New York.

Regional clearing schemes raise many difficult issues. Their successful establishment would require the imagination, cooperation, and support of central and commercial banks in the regions involved as well as the Federal Reserve. Having tried unsuccessfully to organize a London dollar clearing system when I was there back in the '60s, I know some of the problems, and they haven't gone away.

Nevertheless, such regional settlements, if they could be agreed upon, would provide two substantial benefits. They would provide greater transparency in the functioning of the dollar markets in Asia and in Europe. And they would isolate a problem in the time zone where it originates rather than permitting a problem to compound until the close of business in New York.

The third approach to settlement risk reduction involves netting. Some percentage of daylight overdrafts, both at the Fed and at the banks, might be eliminated by systems of net settlements. Again, there are complexities involved in creating such systems -- of timing, of procedure, of finality -- but markets that have adopted them have experienced a dramatic reduction of the huge volumes of gross payments and settlements.

And the risks to all participants have lessened accordingly. Banks should support the netting initiatives now being proposed in the foreign exchange and U.S. government clearing markets, despite possible legal problems, particularly in coping with rights of receivers who may want to honor good contracts and disavow the bad.

If netting were applied more widely through the payments and securities settlements systems, standards for both credit and collateral could be established in the individual markets, with the costs borne pro rata by the participants in each market. Such arrangements would significantly reduce the pressures on and risks to the banks.

Turning to the securities markets, the fourth approach to reducing risk is to improve the way securities transactions are settled. Ideally, all securities transactions in all markets would be settled in a sound book-entry environment, one that allows for the safe and synchronized exchange of securities for cash between trading counterparties or their agents. A good deal of progress toward this goal has been made and continues in a number of countries.

For example, in the United States, the Depository Trust Company, or DTC, already efficiently handles U.S. stocks, corporate bonds, and municipal bonds, all of which settle in

next-day funds. DTC is about to pilot a new system for securities that settle in same-day funds. And in a separate initiative to handle the exploding volume of mortgatge-backed securities, a special-purpose depository for GNMA securities has recently been established.

In the United Kingdom, the Stock Exchange continues to develop its Talisman clearing system to process trades between exchange members, while in parallel it is developing Taurus, a system which will also accommodate investor trade settlements.

In Japan, the Japanese Securities Depository Center has been formed. It will concentrate on constructing a national depository system for Japanese securities. And we have just heard Dr. Herrhausen describe plans to continue the modernization of Germany's settlement systems. Similar efforts are under way in most markets around the world.

One common challenge faced in all of these systems is to minimize the system-wide impact of a given participant's inability to satisfy his net cash obligations. This involves a blend of credit, operating, and collateralization or guarantee procedures. The details vary considerably from system to system, and depend upon who owns the system, who operates it, who participates directly, and who is willing to provide formal contingency credit to the system's participants.

Another common design challenge in each system is to arrange for swift, secure settlement of these cash obligations through access to one or more payments systems.

In those cases where net settlement payments are made as ordinary commercial bank payments through conditional money payment systems such as CHIPS, I think it is clear that additional risks to the system and its participants come into play. Though the better solution would be to eliminate conditionality, until that happens there remains a real world challenge for securities clearing entities which use and depend on payment systems.

There will never be a single book-entry system for all markets and securities around the globe. What should evolve, however, is a "system of systems," if you will, so that individual clearing entities in a given country and across borders are in fact components of a global framework.

This framework cannot be imposed by anyone. It will evolve out of self-interested cooperation and discussions between major market participants, the clearing entities, central banks, and other regulators. As this leads to a shared vision of the problems, the framework should follow. And in fact specific links are being planned, piloted, and activated between almost

every major market location in the world, and between each of those markets and the Euromarket.

While achieving efficiency is a primary goal of these bridging arrangements, the resulting impact on settlement risk creates some difficult issues. The credit structure underlying any given system was not designed to backstop fully other systems with which links might be established. The goal must surely be to achieve "seamless" processing in an operational sense, but with maximum containment of risk to the system and the market where problems originate.

Finally, let me mention the thorny question of access to the payments system by nonbank institutions. In one sense, of course, such access would increase settlement risk: if you deal with a larger number of counterparties, many of which are more highly leveraged than banks, the odds of an individual failure increase. From a broader risk containment perspective, however, I think there is some merit in considering allowing large nonbank market participants into the net, given that regulatory treatment of everyone is the same. Insofar as this would increase market transparency, and recognize the major role played by nonbank financial institutions in the movement of money, it would almost surely work to the good in the event of a system crisis.

That said, as long as major nonbank institutions get the benefits and we bear the risks and the costs, I doubt they will clamor for entry to the payments system. But if they do begin to share in the cost of system risk or see profit or other opportunities in participation, the story could change. There is one school of thought that posits nonbank entry to the payments system as a quid pro quo for bank entry into the securities markets in the United States.

I must say I do not entirely share my friend Gerry Corrigan's aversion to mixing banking and commerce, as long as everyone plays by the same rules. I understand the problems involved in applying the same rules to everyone, and I have no doubt that Gerry will use excellent logical arguments to explain why it isn't really possible. Hearing them in this land of universal banking will be interesting, and I look forward to doing so!

Rethinking Glass-Steagall

The case for allowing bank holding company subsidiaries to underwrite and deal in corporate securities

December 1984

J. P. Morgan & Co. Incorporated

Historical perspective on the Glass-Steagall Act

Congress passed the Banking Act of 1933 in response to the collapse of the banking system early that year. Legislators designed the Act to restore public confidence in the system and to protect depositors by insuring the stability of commercial banks. In establishing federal deposit insurance and expanding the powers of the Federal Reserve Board, the Act remedied basic flaws in the structure of the banking system. The Act also included provisions that substantially separated commercial banking from investment banking, the benefits of which have proved dubious. These divorce provisions today are commonly referred to as the Glass-Steagall Act.

Structural defects in the banking system and abuses in the financial markets obviously required congressional attention in 1933. In view of the economic crisis confronting the nation and the public hostility toward the financial community engendered by the stock market crash, the banking collapse, and disclosures of questionable financial practices, it is not surprising that Congress was receptive to sweeping financial reform. Indeed, many of the measures introduced at the time—the creation of federal deposit insurance, for example—have had enduring positive effects.

In banishing commercial banks from the corporate underwriting and dealing markets, however, the Glass-Steagall Act imposed unduly broad restrictions. Its provisions, based on a theory of sound banking practice that Senator Carter Glass had championed for years, won support because of unproved assumptions about the roots of the banking crisis—specifically, that commercial banks' securities activities were an important cause of the banking system's failure. We know now that such activities had little, if anything, to do with the banking crisis. Structural flaws—poor capitalization and inadequate supervision, in addition to external economic factors—led to the breakdown. While certain provisions of the Banking Act of 1933 addressed these problems, the divorce provisions did not.

Finally, it is important to recognize that the securities laws enacted in 1933 and 1934 addressed the problems that had developed in the marketing and trading of securities—problems that were not limited, of course, to commercial banks' securities activities. These statutes supplied the foundation for a regulatory structure that has proved extremely effective to this day in controlling abuses in the securities markets.

The political background

Senator Carter Glass—the principal force behind the adoption of the Glass-Steagall Act—approached the banking crisis that developed in the early 1930s with a predisposition toward a radical, structural solution. He believed that commercial and investment banking were inherently incompatible and that commercial banks should confine themselves to making short-term, self-liquidating loans to finance commercial transactions.[1] As commercial banks and their affiliates became increasingly active in the securities markets during the first three decades of this century, Senator Glass became more and more concerned with what he regarded as a departure from principles of sound banking practice. He

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1 *See, e.g.*, U.S. Department of Treasury, *Public Policy Aspects of Bank Securities Activities*, A-12-A-15 (1975); Perkins, "The Divorce of Commercial and Investment Banking: A History," 88 *Banking L. J.* 483, 490-505 (1971). The theoretical basis of Glass' views was the "real bills" doctrine. This doctrine held that if banks made only short-term, self-liquidating loans to finance commercial transactions "the expansion of bank money [would] be in proportion to any extension in trade that [might] take place or to 'the needs of trade,' and that, when trade contract[ed], bank loans would be correspondingly paid off." L. Mints, *A History of Banking Theory*, 9 (1945). A closely associated doctrine held that "if only commercial loans [were] made, the currency [would] have a desirable elasticity and the banks [would] at all times be in a liquid position." *Id.* Although this theory enjoyed some influence during the early stages of federal banking regulation in the nineteenth century, it never had much influence at the state level, at least with respect to the desirability of enforcing a separation of commercial and investment banking. Moreover, by the early 1900s the barrier between commercial and investment banking had eroded at the federal level as well, marking a decline in the influence of the theory in this regard.

was critical of the McFadden Act, adopted in 1927, which confirmed national banks' authority to underwrite certain investment securities. Later, he observed:

> *"[W]hen we have had occasion to propose modifications of either the Federal reserve act or the national banking act it has seemed to me that instead of creating a national standard of sound banking which the State systems might be induced to follow, we have introduced into the national banking system some, if not many, of the abuses of the State systems, in order to enable national banks to compete with State banks."* [2]

At the Brokers' Loans Hearings in 1928 Glass expressed concern over the volume of commercial banks' loans to brokers. He stated that the proponents of the Federal Reserve Act, of which he had been a principal architect, thought "we should have a system that would meet the requirements of legitimate industry and commerce, and not a system that would lend itself to what many of us regard as an unproductive operation of stock and commodity gambling."[3] In short, Glass thought that commercial banks' securities activities were inconsistent with sound banking practice.

Congress' consideration of Glass-Steagall

The stock market crash in October 1929 provided the initial impetus for Glass' efforts to make commercial banking practice conform with his theories. In May 1930 the Senate approved S. Res. 71, which authorized the Senate Committee on Banking and Currency "to make a complete survey" of the national and Federal Reserve banking systems, with particular attention to banks' involvement in speculative securities activities through investments, through the extension of credit to support such activities, and through the formation of "investment and securities trusts."[4] One month later, Senator Glass introduced a bill that included certain provisions to which the origins of the Glass-Steagall Act can be traced. Although the relevant provisions in this package of reforms bore little resemblance to the legislation that ultimately became the Glass-Steagall Act, the bill did contain a provision somewhat similar to section 16 of the Act, which prohibits banks from underwriting or dealing in corporate securities.[5] The bill also provided for the regulation of affiliates by requiring member banks to file reports on each of their affiliates with the federal regulatory authorities. The term "affiliate" was defined broadly to include, among other things, a "finance company, securities company, investment trust, or other similar institution" controlled directly or indirectly by a bank "or by the shareholders thereof who own or control a majority of the stock of such bank." [6]

No immediate action was taken in response to the passage of S. Res. 71 or to the introduction of Glass' bill. In late 1930, however, an increase in the rate of bank failures provided further impetus for congressional action in the banking field. Of the 1,350 banks that failed in 1930, more than 600 of them failed in November and December of that year. Moreover, the failure of the Bank of United States in December shook the confidence of depositors. The failure not only was the largest in history at that time, but also involved a bank whose name caused many people to think it had a special, official status.

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2 *Operation of the National and Federal Reserve Banking Systems: Hearings Pursuant to S. Res. 71 Before a Subcomm. of the Senate Comm. on Banking and Currency*, 71st Cong., 3d Sess. 14 (1931) (statement of Sen. Glass) [hereinafter S. Res. 71 Hearings].

3 *Brokers' Loans: Hearings Before the Senate Comm. on Banking and Currency on S. Res. 113*, 70th Cong., 1st Sess. 53 (1928) (statement of Sen. Glass).

4 *See* 72 Cong. Rec. 8335 (daily ed. May 5, 1930) (Senate approves S. Res. 71). S. Res. 71 had been reported to the full Senate by the Committee on Banking and Currency in April 1930. *See* S. Rep. No. 493, 71st Cong., 2d Sess. (1930). The resolution had been introduced in May 1929 by Senator King. *See* S. Res. 71, 71st Cong., 1st Sess., 71 Cong. Rec. 1830 (daily ed. May 24, 1929).

5 12 U.S.C. sec. 24. Section 16 governs the activities of national banks. Section 5(c) of the Banking Act of 1933 applied the restrictions of section 16 to state member banks. *See* 12 U.S.C. sec. 335.

6 S. 4723, 71st Cong., 2d Sess., 72 Cong. Rec. 10,973 (daily ed. June 17, 1930).

Against this background a subcommittee of the Senate Committee on Banking and Currency chaired by Senator Glass conducted in early 1931 the first major set of hearings on the subjects ultimately covered by the Glass-Steagall Act.[7] Under Glass' direction, the subcommittee focused on commercial banks' participation in speculative securities activities through the extension of credit to support such activities, through investment practices, and through securities affiliates. In an appendix to the hearings, the subcommittee suggested that "[t]he experience of the past 10 years lends spectacular confirmation to the view that the more intensive participation by commercial banks in the capital market exaggerates financial and business fluctuations and undermines the stability of the economic organization of the country."[8] In a section of the appendix devoted to securities affiliates, the subcommittee stated that such affiliates were engaged in a variety of activities, ranging from acting as a real-estate holding company to underwriting securities.[9]

Referring generally to securities affiliates, the subcommittee identified a number of ways in which the operations of such an affiliate might affect adversely the position of a bank. It is difficult to determine the precise nature of Congress' concerns, and more particularly the specific problems that were peculiar to bank underwriting affiliates, since Congress had such a broad conception of the functions of "securities" affiliates. The subcommittee appears to have been most concerned, however, about loan transactions between a bank and its affiliate. The subcommittee suggested that such debtor-creditor relationships were "very prevalent" and asserted that these relationships were the "most direct manner in which the affiliate [might] impair the liquidity of the bank. . . ."[10] Ultimately, the question of potentially harmful securities or loan transactions between a bank and its affiliate was addressed by section 13 of the Banking Act of 1933, which added a new section 23A to the Federal Reserve Act.[11]

Following the hearings, there was again a lull in efforts to curb the underwriting and investment activities of commercial banks. The continued deterioration of the banking system during 1931, however, increased the pressure for some congressional action. After a respite in early 1931, a "spate of runs began in March . . and reached a high point in June, attacking the Midwest, Pennsylvania, and New York in particular, intensifying with the collapse of the major European central banks."[12] The situation was aggravated by Great Britain's abandonment of the gold standard in September. All told, there were 2,290 bank failures during 1931.

In March 1932 the Senate Committee on Banking and Currency held the second major set of hearings on the subjects ultimately covered by the Glass-Steagall Act.[13] Glass' original bill had gone

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7 *See* S. Res. 71 Hearings, note 2 *supra*.

8 *Id.*, at 1001.

9 *Id.*, at 1057. The subcommittee's discussion highlights the broad scope of the term "securities affiliate" as used by Congress during its consideration of the Glass-Steagall Act. The subcommittee stated that securities affiliates served as: 1) wholesalers of security issues; 2) retailers of securities; 3) holding and finance companies; 4) investment trusts (engaged in buying and selling securities acquired purely for investment or speculative purposes); 5) assets realization companies (used to take over from the parent bank loans and investments that proved to be doubtful or illiquid); 6) mediums for supporting the market for the bank's own stock; and 7) real estate holding companies. The subcommittee noted that "in most cases" the securities affiliates "exercised a combination of these functions, and in some instances they have exercised all of them." *Id.*

10 *Id.*, at 1064. *See also id.*, at 1063-64 (subcommittee's discussion of other ways in which the operations of an affiliate might affect adversely the position of a bank).

Despite the critical view of affiliates taken by the subcommittee in the appendix to the hearings, it is noteworthy that Senator Glass apparently still had doubts about the feasibility of separating affiliates from commercial banks. At one point during the hearings he had stated: "Well I myself . . rather question the feasibility maybe of abolishing [securities affiliates] because they have been permitted for so long to exist. It might create a confusion and embarrassment that would be worse than the evil itself." *Id.*, at 40. But Glass did say that if it were not possible to control securities affiliates, "[he] should be agreeable to prohibiting them." *Id.*, at 41.

11 For a discussion of this provision, see page 11 *infra*.

12 S. Kennedy, *The Banking Crisis of 1933*, 19 (1973).

13 *See Operation of the National and Federal Reserve Banking Systems: Hearings on S. 4115 Before the Senate Comm. on Banking and Currency*, 72d Cong., 1st Sess. (1932).

through two revisions, and the proposal that was the subject of the hearings included provisions that were more extensive and severe in their treatment of commercial banks' securities activities than the provisions in the bill Glass had introduced in June 1930. The new provisions were designed to separate commercial and investment banking. Representatives of the financial community opposed the bill and criticized it as extremely deflationary. In addition, the Federal Reserve Bank of New York characterized as "unwise" the provisions calling for "a divorce of the banking system and the capital market." Governor Harrison stated that these provisions would "disturb the mechanism of the capital market, the free functioning of which is now so important to a recovery from existing business conditions."[14]

Testifying for the Federal Reserve Board, Governor Eugene Meyer acknowledged that "affiliations between member banks and security companies have contributed to undesirable banking developments."[15] Meyer noted, however, that there were "difficulties in the way of accomplishing a complete divorce of member banks from their affiliates arising from the fact that a law intended for that purpose is likely to be susceptible of evasion or else to apply to many cases to which it is not intended to apply."[16] In this light, the Board was "not prepared . . . to make a definite recommendation . . . ." Meyer did offer a tentative suggestion, however, in the form of a proposal providing for the divorce of securities affiliates from member banks after three years.[17] Meyer stressed the tentative nature of this proposal:

> *"It is fair to say that, while the board is in agreement on the views stated, there has been a good deal of discussion of the thought that the question of divorce of affiliates might perhaps be better deferred, instead of acting at this time to be effective three years from now, and in the meantime to get reports and make examinations and then enact a law later. However, the suggestion here was agreed upon as the best we could think of at the present time in the light of existing information, or I might say in the absence of full information on the subject. We do not feel, in the absence of more definite information, any too great confidence in any recommendation that we or anyone else could make. But this is a suggestion for your consideration, which was the best we could evolve in the board with the assistance of our experts."*[18]

Later, Meyer stated that "the question as to separation of affiliates, in our minds, is in the realm of the unknown to a certain extent, because of the absence of full information, and the board offers no strong recommendation, although it submits a suggestion."[19]

Following the hearings, Glass again revised his bill and incorporated Meyer's suggestion. The committee report accompanying S. 4412 stated that "[t]he outstanding development in the commercial banking system during the prepanic period was the appearance of excessive security loans, and of overinvestment in securities of all kinds."[20] The report also stated that "a very fruitful cause of bank failures, especially within the past two years, has been the fact that the funds of various institutions have been so extensively 'tied up' in long-term investments."[21] In contrast, it is interesting to note that

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14 *Id.*, at 501 (letter of George L. Harrison, Governor, Federal Reserve Bank of New York). Governor Harrison's letter had been unanimously approved by the directors of the Bank. *See id.*, at 499.

15 *Id.*, at 388 (statement of Eugene Meyer, Governor, Federal Reserve Board).

16 *Id.*

17 *Id.* Congress ultimately seized upon Meyer's proposal in formulating section 20 of the Glass-Steagall Act.

18 *Id.*

19 *Id.*, at 400. In response to questions, Meyer had stated that "it is impossible to classify absolutely all affiliates that deal in securities as wicked and vicious." *Id.*, at 393.

20 S. Rep. No. 584, 72d Cong., 1st Sess. 8 (1932).

21 *Id.*

at the hearings in 1931, the Comptroller of the Currency made the following statement: "I think it can fairly be said that I know of no instance where the shrinkage in value of collateral or bank investments as far as national banks are concerned, has been responsible for any bank failure or very, very few of them."[22]

Finally, the report on S. 4412 was very critical of bank affiliates. It stated that such affiliates "in many cases [devote themselves] to perilous underwriting operations, stock speculation, and maintaining a market for the banks' own stock often largely with the resources of the parent bank."[23] The report did not offer any specific examples of these problems. In fact, there was no evidence that commercial banks failed because of their own or their affiliates' underwriting activities. As the President's Council of Economic Advisers has observed, "there is no evidence to support [the] proposition [that] bank failures in the early 1930's were [attributable] to the role of banks in the securities business."[24]

The Senate debated S. 4412 in May 1932. In addition to the provisions of interest here, the bill included a broad range of proposals unrelated to the securities activities of commercial banks. During the debate, Glass mentioned the banking community's continued opposition to the separation of securities affiliates from commercial banks, but suggested that "[t]he committee ascertained in a more or less definite way—we think quite a definite way—that one of the greatest contributions to the unprecedented disaster which has caused this almost incurable depression was made by these bank affiliates."[25] Glass stated that the affiliates "sent out their high-pressure salesmen and literally filled the bank portfolios of this country with these investment securities."[26] Glass offered no specific evidence to support these claims. In fact, the implication that the smaller banks were failing because of their investment in unsound securities forced upon them by the larger banks was not justified.[27]

Although Glass tried repeatedly to persuade the Senate to vote on S. 4412, the Senate did not act before the end of the session. Spurred by President Roosevelt's election and a continued deterioration of the banking system, the Senate did pass S. 4412 in January 1933 during the lame-duck session of the 72nd Congress.[28] The House, however, failed to act on the bill.

In the early months of 1933, several events helped Glass considerably in his efforts to secure enactment of these proposals. First, the Pecora hearings on stock exchange practices focused public attention on questionable financial dealings.[29] The hearings revealed, among other things, that one commercial bank and its affiliate had failed repeatedly to disclose material facts to investors, that the affiliate had engaged in high-pressure sales tactics, that the affiliate had traded in the stock of the bank and participated in a range of manipulative activities, that the bank had provided the affiliate with customers, and that the bank had used the affiliate to relieve the bank of bad loans to the alleged

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22 S. Rep. 71 Hearings, note 2 *supra*, at 12 (statement of J. W. Pole, Comptroller of the Currency). It should be noted that the shrinkage in value of collateral and bank investments did become a widespread problem as the depression and the banking crisis deepened. In the face of runs by depositors, banks were forced to achieve greater liquidity by dumping their assets on the market. For a discussion of the causes of the banking crisis, see pages 8-12 *infra*.

23 S. Rep. No. 584, 72d Cong., 1st Sess. 9 (1932).

24 *Economic Report of the President*, 148 (1984). For further discussion of this issue, see pages 9-11 *infra*. Moreover, the problem of an affiliate's maintaining a market for the bank's own stock was addressed by the Securities Exchange Act of 1934. *See* page 12 *infra*.

25 75 Cong. Rec. 9887 (daily ed. May 10, 1932) (statement of Sen. Glass).

26 *Id.*

27 For a discussion of this issue, see page 10 *infra*.

28 *See* 76 Cong. Rec. 2517 (daily ed. Jan. 25, 1933).

29 *See generally Stock Exchange Practices: Hearings Before a Subcomm. of the Senate Comm. on Banking and Currency on S. Res. 84 and S. Res. 239*, 72d Cong., 2d Sess. (1933).

detriment of shareholders.[30] Most of the abuses revealed by the Pecora hearings were addressed by the Securities Act of 1933 and the Securities Exchange Act of 1934.[31]

In addition, in early March 1933 the National City Bank and the Chase National Bank decided to drop their securities affiliates.[32] In making the announcement for the Chase, Winthrop W. Aldrich, its new chairman, went on to propose several major reforms designed to separate commercial and investment banking.[33] In this regard, it appears that Aldrich was primarily responsible for the inclusion of the provision that was to become section 21 of the Glass-Steagall Act,[34] which prohibits entities that underwrite or deal in corporate securities from receiving deposits.[35] These events represented a significant break in the banking community's opposition to Glass' bill.

In the end, the development of a full-blown banking crisis in late 1932 and early 1933 was probably the most important event leading to enactment of the Glass-Steagall Act. From 1921 to 1933, there had been more than 10,000 bank failures. Until 1932, the failures basically had been confined to small, rural, state-chartered banks. Senator Glass offered the following description of the 8,221 banks that had failed during the eleven-year period from 1921 to 1931:

> *"There are approximately 22,000 institutions called banks; but thousands of them were little pawnshops that never should have been chartered either by the Federal Government or by State governments. Fifty-nine percent, or 4,861 of these suspended banks had a capital of $25,000 or less; 25½ per cent, or 2,175 of these banks had a capital exceeding $25,000 but not exceeding $50,000; and of the 8,221 failures, only 37 banks, or four-tenths of 1 per cent, had a capital of as much as $1,000,000. Over 60 per cent of these failures occurred in communities with a population of less than 1,000 inhabitants, and over 90 per cent of these failures occurred in cities and towns with a population of less than 25,000 inhabitants.*
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> *"It is, therefore, obvious that the problem is largely one of small rural bank failures."* [36]

During 1932, however, the failures began to spread and at the end of that year and in early 1933 entire state banking systems began to collapse. The escalation of the panic put intense pressure on the New York banks, which were faced not only with demands for cash from their local depositors, but also with withdrawals by the interior banks. By early March 1933 bank holidays had been declared in about half the states, including New York and Illinois. Finally, President Roosevelt declared a national bank

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30 *See* F. Pecora, *Wall Street Under Oath*, 70-123 (1939).

31 *See* page 12 *infra*.

32 In March 1933, "[m]any other affiliates were . . . in process of liquidation, or had been previously dissolved, either because final passage of the Glass bill was anticipated or because banks welcomed the opportunity to rid themselves of affiliates which they had thought necessary or highly desirable during the twenties." Peach, "The Security Affiliates of National Banks," in *Wall Street and the Security Markets*, 158 (V. Carosso ed. 1975). The investment banking business had dropped off substantially, and "no one was prepared to predict how soon, if ever again, this commercial banking sideline might be able to pay its own way." Perkins, note 1 *supra*, at 522.

33 *See Wall Street Journal*, Mar. 10, 1933, at 8; *New York Times*, Mar. 9, 1933, at 1. *See also Stock Exchange Practices: Hearings Before the Senate Comm. on Banking and Currency on S. Res. 84 and S. Res. 56*, 73d Cong., 2d Sess. 3977 (statement of Winthrop W. Aldrich, Chairman, Chase National Bank).

34 *See id.*, at 4016, 4032 (statement of Sen. Glass) (colloquy between Sen. Glass and Winthrop W. Aldrich); A. Johnson, *Winthrop W. Aldrich*, 156 (1968). It is likely that Aldrich's announcement, and section 21 in particular, were directed at particular competitors. *See* S. Kennedy, note 12 *supra*, at 212-13; J. Brooks, *Once in Golconda*, 149, 211 (1970); 8 *St. John's L. Rev.* 193, 195-96 (1933); *New York Times*, Mar. 9, 1933, at 1; *Wall Street Journal*, Mar. 10, 1933, at 8. As Arthur Schlesinger has noted, "Aldrich's [announcement] was interpreted as a Rockefeller assault on the House of Morgan. . . ." A. Schlesinger, *The Age of Roosevelt: The Coming of the New Deal*, 434-35 (1958).

35 12 U.S.C. sec. 378.

36 75 Cong. Rec. 9892 (daily ed. May 10, 1932) (statement of Sen. Glass).

holiday. Combined with Congress' enactment of emergency banking legislation in early March,[37] this stabilized the situation and permitted the reopening of most of the surviving banks. A consensus had developed, however, on the need to reform the banking structure.

At the beginning of the 73rd Congress in March, Glass introduced a bill similar to the one that had passed the Senate in January. This bill was revised and a new version was introduced in May. The new version, S. 1631, included provisions substantially similar to all four sections of the Glass-Steagall Act.

In mid-May, the Senate Committee on Banking and Currency reported S. 1631 to the full Senate. The report accompanying the bill was similar to the one that had accompanied the bill that the Senate had passed in January, and, in fact, contained some language identical to language in the earlier report.[38]

The Senate debated S. 1631 in late May. The statements of the bill's proponents were not much different from the ones they had made on prior occasions. At one point, for example, Senator Glass stated:

> *"[T]hese affiliates, I repeat, were the most unscrupulous contributors, next to the debauch of the New York Stock Exchange, to the financial catastrophe which visited this country and was mainly responsible for the depression under which we have been suffering since. They ought to be separated, and they ought speedily to be separated, from the parent banks; and in this bill we have done that."*[39]

The Senate passed S. 1631 without a record vote on May 25, 1933.[40] Following a House-Senate conference on the legislation, which for present purposes basically resulted in adoption of the Senate bill, the Senate and House both approved the conference report on June 13.[41] The legislation was enacted on June 16, 1933.

Analysis of Congress' reasons for adopting the Glass-Steagall Act

The proponents of the Glass-Steagall Act advanced four reasons for separating commercial and investment banking:

- commercial banks' securities activities had contributed to, if not caused, the stock market crash and the depression;
- commercial banks' securities activities (investment and underwriting) had caused the collapse of the banking system;
- there were problems associated with relationships between commercial banks and securities affiliates; and

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37 This legislation, among other things, granted the President certain emergency banking and currency powers; provided for the appointment of conservators for certain national banks with impaired assets; permitted the Reconstruction Finance Corporation to buy preferred stock, capital notes, and debentures of banks; and provided for emergency issues of Federal Reserve Bank notes. *See* M. Friedman & A. Schwartz, *A Monetary History of the United States 1867-1960*, 421-22, 427 n. 4 (1963).

38 *Compare* S. Rep. No. 77, 73d Cong., 1st Sess. 8-10 (1933) *with* S. Rep. No. 584, 72d Cong., 1st Sess. 8-10 (1932).

39 77 Cong. Rec. 3726 (daily ed. May 19, 1933) (statement of Sen. Glass).

40 *See id.*, at 4182 (daily ed. May 25, 1933). This discussion has focused on activities in the Senate because the House, at least with respect to the provisions of interest here, basically followed the Senate's lead. *See, e.g., id.*, at 3835 (daily ed. May 23, 1933) (statement of Rep. Henry Steagall). The House always had been more interested in federal deposit insurance than in the Glass-Steagall provisions. The debates on the Glass-Steagall provisions in the House were very similar to those in the Senate. *See, e.g., id.* It should be noted, however, that the House passed its version of the Banking Act of 1933 on May 23, 1933, two days before the Senate took final action. *See id.*, at 4058 (daily ed. May 23, 1933).

41 *See id.*, at 5863 (daily ed. June 13, 1933) (Senate); *id.*, at 5898 (daily ed. June 13, 1933) (House). *See also id.*, at 5861 (daily ed. June 13, 1933) (statement of Sen. Glass); *id.*, at 5892 (daily ed. June 13, 1933) (statement of Rep. Steagall).

• commercial banks had been involved in objectionable practices in the marketing of securities.[42]

If each of these reasons is analyzed carefully, however, it becomes clear that none of them provided adequate justification for separating commercial and investment banking. In some instances, Congress had no support in the record for the conclusions it drew. Moreover, to the extent that there were problems with the banking system and abuses associated with commercial banks' securities activities, they were addressed far more precisely and effectively by legislation other than the Glass-Steagall Act.

The stock market crash and the depression Although economists disagree about which elements were most important in causing a depression of such unprecedented severity, there is general agreement that commercial banks' securities activities were not a significant factor. The gamut of opinion on the dominant causes is spanned by the Keynesian and monetarist viewpoints. The Keynesian view emphasizes the collapse in aggregate demand:

> *"The shrinkage of employment, real output, and real income during the depression . . . reflected the failure of the prevailing economic system to translate the wants and desires of the people into a level of spending, or aggregate money demands for output, sufficiently high to make it profitable for business firms to employ all available labor, to utilize other existing productive resources, and to invest in new capital."* [43]

The monetarist view focuses on the decline in the money stock. Two monetarists note:

> *"The monetary collapse was not the inescapable consequence of other forces but rather a largely independent factor which exerted a powerful influence on the course of events. . . . Prevention or moderation of the decline in the stock of money, let alone the substitution of monetary expansion, would have reduced the contraction's severity and almost as certainly its duration."* [44]

Neither of these polar views nor any of the diverse opinions in between attributes the economic collapse to the securities activities of commercial banks. This supports the view that Congress vastly overstated the extent to which commercial banks' securities activities contributed to the development of the economic crisis.

It is also important to recognize that there was nothing particularly insidious about the securities activities of commercial banks, conducted either directly or through affiliates. Investment banking houses also were involved in the securities markets. Any problems or abuses that developed were not confined to the activities of commercial banks.[45] Moreover, to the extent that there were abuses that contributed to the crash, or aggravated its effects, they were addressed far more directly and effectively by the Securities Act of 1933 and the Securities Exchange Act of 1934 than by the Glass-Steagall Act, which simply limited the market participation of commercial banks. The Securities Act dealt broadly with the issuance and distribution of securities to the public. The Securities Exchange Act subjected the

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42 In *Investment Company Institute* v. *Camp*, 401 U.S. 617 (1970), and *Securities Industry Association* v. *Board of Governors*, 104 S.CT. 2979 (1984), the Supreme Court reviewed the legislative history of the Glass-Steagall Act and noted Congress' perception that commercial banks' securities activities threatened the stability of the commercial banking system and led to undesirable banking practices. The Court conducted this review to determine Congress' intent in passing the legislation and the Court's conclusions appear to have influenced significantly the decisions in these cases. It is important to recognize, however, that the Court's determination of legislative intent based on a review of the legislative history does not address, let alone confirm, the accuracy of the perceptions and assumptions on which the Glass-Steagall Act was based.

43 L. Chandler, *America's Greatest Depression: 1929-1941*, 1-2 (1970).

44 M. Friedman & A. Schwartz, note 37 *supra*, at 300-01.

45 *See, e.g.*, V. Carosso, *Investment Banking in America*, 317-18, 322-29 (1970) (discussions, among others, of the practices of Lee, Higginson & Co. and Halsey, Stuart & Co.); J. Galbraith, *The Great Crash 1929*, 38-57 (1979).

exchanges to government regulation, outlawed fraudulent and manipulative stock exchange practices, and authorized the Federal Reserve to regulate the extension of credit to purchasers of securities.

The banking crisis The collapse of the banking system was attributable principally to basic defects in the American banking structure. These flaws were revealed in the more than 5,000 bank failures that occurred from 1921 to 1929 during a period of apparent economic prosperity. Banks' investment or underwriting activities did not cause these failures: rather, factors such as poor management, inadequate supervision, undercapitalization, the depressed state of staple agriculture, and improved methods of transportation, which had put larger, more efficient banks within easy reach of many of the smaller banks' former customers, created the banks' problems.[46]

Even after the wave of failures that hit the nation during the 1920s, there were 24,912 separately incorporated unit banks scattered across the country in June 1929. Of these banks, 72% had capital of less than $100,000. The devastating effects of a significant economic downturn on such a weak banking structure are not hard to imagine. The failure of these small banks led to an erosion of depositor confidence, to hoarding, and to runs.[47] The pressure created by these conditions made it difficult for even the soundest banks to survive. In 1932, Senator Glass noted:

> *"[The failure of small banks], notwithstanding their inconsequential activities in some respects, created a psychology which was extremely detrimental to the whole banking and business community. When three or four small banks in any given section of the country in any State fail, the fact of the failure of three or four banks in that section, however small they may be, begins to create consternation, to undermine public confidence, and to create runs on the larger and stronger banks."*[48]

As Senator Glass recognized, the system was vulnerable to runs, and once the runs started they were hard to stop. In the face of actual or anticipated runs, banks were forced to achieve greater liquidity by dumping their assets on the market. This had the predictable effect of reducing the value of the banks' remaining assets and making them all the more vulnerable to assaults by depositors. Two commentators describe the phenomenon this way:

> *"[A]ny runs on banks for whatever reason became to some extent self-justifying, whatever the quality of assets held by banks. Banks had to dump their assets on the market, which inevitably forced a decline in the market value of those assets and hence of the remaining assets they held. The impairment in the market value of assets held by banks, particularly in*

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46 *See, e.g.*, S. Res. 71 Hearings, note 2 *supra*, at 7 (statement of J. W. Pole, Comptroller of the Currency); S. Kennedy, note 12 *supra*, at 16; M. Friedman & A. Schwartz, note 37 *supra*, at 240; C. Bremer, *American Bank Failures*, 47 (1935). Eighty-two percent of the banks that failed during the 1920s were small, state-chartered, rural institutions. *See* S. Kennedy, note 12 *supra*, at 205. Of the banks that failed, 39% had capital of less than $25,000, and 88% had capital of less than $100,000. *See* C. Bremer, *supra*, at 47. Moreover, "about 70 per cent of all bank failures . . . occurred in twelve agricultural states of which 41 percent consisted of banks situated in seven Western grain states." H. P. Willis & J. Chapman, *The Banking Situation*, 315 (1934). *See also* S. Res. 71 Hearings, note 2 *supra*, at 3-7 (statement of J. W. Pole, Comptroller of the Currency); S. Kennedy, note 12 *supra*, at 16; M. Friedman & A. Schwartz, note 37 *supra*, at 240, 249; C. Bremer, *supra*, at 57.

47 Two commentators have suggested that "the growth of postal savings deposits from 1929 to 1933 is one measure of the spread of distrust of banks." M. Friedman & A. Schwartz, note 37 *supra*, at 308 n. 8. In November 1914, postal savings deposits totaled $57 million. By August 1929 they had grown by only $100 million. In October 1930 they stood at $190 million. Between then and March 1933 they increased to $1.1 billion. *Id.*

48 75 Cong. Rec. 9889 (daily ed. May 10, 1932) (statement of Sen. Glass).

> *their bond portfolios, was the most important source of impairment of capital leading to bank suspensions, rather than the default of specific loans or of specific bond issues."* [49]

Similarly, the President's Council of Economic Advisers has stated:

> *"It is now widely asserted that the length and severity of the banking collapse of the 1930s was not the result of overly risky bank portfolios. Rather, many economists argue that these failures became widespread, initially, because of the reluctance of the Federal Reserve System to engage in aggressive open market operations to counter the conversion of deposits to currency and, later, because of the Federal Reserve's failure to assure adequate liquidity to banks experiencing runs on their deposits. As banks scrambled to liquidate their assets to meet the demands of their depositors for currency, their asset values fell, thus creating insolvencies."* [50]

This analysis suggests that there was no validity to Glass' notion that banks' "overinvestment" in speculative securities had led to the collapse of the banking system.[51] It also indicates that there was no substantial evidence to support the argument that bank underwriting affiliates had contributed significantly to the failure of smaller correspondent banks by pressuring them into purchasing unsound securities. It is, in fact, implausible that underwriting affiliates were able to create artificial demand for securities. Rather, the increased demand for securities was attributable to factors such as the decline in banks' commercial loan business.[52] The business boom during the 1920s had put many American businesses in a cash-rich position. Moreover, the public had developed an intense interest in investment securities. These conditions made it possible for businesses to pursue "internal and external financing not involving bank loans."[53] There also is no reason to believe that investment banking houses would not have met commercial banks' demand for securities in the absence of bank underwriting affiliates. Finally, to whatever extent these affiliates sold unsound or speculative securities to unwitting correspondent banks, the problem was addressed by the portion of section 16 of the Glass-Steagall Act

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49 M. Friedman & A. Schwartz, note 37 *supra*, at 355. In support of their position, Friedman and Schwartz cite a study showing that from the middle of 1931 to the middle of 1932 railroad bonds lost nearly 36% of their market value, public utility bonds 27%, industrial bonds 22%, foreign bonds 45%, and United States government securities 10%. *Id.*, at 355 n. 65. Friedman and Schwartz go so far as to suggest that "[i]n the absence of the provision of additional high-powered money, banks that suffered runs as a result of the initial failure of 'bad' banks would not have been helped by holding solely U.S. government securities in addition to required reserves." *Id.*, at 356-57. They state: "If the composition of [the banks'] assets did not stop the runs simply by its effect on depositors' confidence, the banks would still have had to dump their government securities on the market to acquire needed high-powered money, and many would have failed." *Id.*, at 357. *See also* J. Galbraith, note 45 *supra*, at 158-59 ("Since the early thirties, a generation of Americans has been told, sometimes with amusement, sometimes with indignation, often with outrage, of the banking practices of the late twenties. In fact, many of these practices were made ludicrous only by the depression. Loans which would have been perfectly good were made perfectly foolish by the collapse of the borrower's prices or the market for his goods or the value of the collateral he had posted . . . . A depression such as that of 1929-32, were it to begin as this is written, would also be damaging to many currently impeccable banking reputations.").

50 *Economic Report of the President*, 117 (1983).

51 To the extent that Congress was concerned about the volume of bank investments, irrespective of quality, it is interesting to note that the Glass-Steagall Act had little effect on this "problem." Under the terms of the Act, banks were free to continue to invest in all types of debt securities. Obligations of the United States or general obligations of States or political subdivisions were not subjected to the restrictions of section 16. Moreover, banks could invest in other debt securities, including corporate debt, eligible for investment under criteria promulgated by the Comptroller.

52 From 1920 to 1929, commercial banks' deposits increased by 35.8% and their investments increased by 67.1%. Their loans, however, increased by only 27.2%. For national banks, the trend is even more pronounced. From 1920 to 1929, national banks' deposits increased by 25.8% and their investments increased by 64.3%, while their loans increased by only 9.7%. *See* Board of Governors of the Federal Reserve System, *Banking and Monetary Statistics* (1943).

53 M. Friedman & A. Schwartz, note 37 *supra*, at 244-45. *See also* M. Nadler & J. Bogen, *The Banking Crisis*, 15-17 (1933).

that provided for regulation of certain bank investments by the Comptroller, and by the disclosure requirements of the Securities Act of 1933.[54]

Any notion that commercial banks failed because of their own underwriting activities is belied by the years of experience preceding the stock market crash and the depression. State banks and trust companies had been involved in the investment banking business since the latter half of the nineteenth century with no serious adverse effects. National banks had been participating in the securities markets since the turn of the century, with The First National Bank in New York creating the first securities affiliate on record in 1908. These activities do not appear to have threatened the stability of banks.

It is noteworthy that the legislative history of the Glass-Steagall Act does not reveal any large bank failures attributable to the marketing or underwriting activities of a bank's securities affiliate. It is true that the failure of the Bank of United States was commonly attributed to the activities of its "securities affiliates."[55] Fraud, however, was primarily responsible for the failure of that bank. Moreover, the bank's affiliates were used principally to conduct the personal, and highly speculative, business ventures of the bank's officers, particularly in real estate. The affiliates were involved in the securities business only to the extent that they were used by the bank's officers to trade in the bank's own stock and to engage in other manipulative activities.[56] In short, the failure of the Bank of United States provided no support for separating commercial and investment banking.

Other provisions of the Banking Act of 1933 were far more responsive to the structural defects that led to the collapse of the banking system than the Glass-Steagall Act. In this regard, two commentators have asserted that "[f]ederal insurance of bank deposits was the most important structural change in the banking system to result from the 1933 panic, and, indeed in our view, the structural change most conducive to monetary stability since state bank note issues were taxed out of existence immediately after the Civil War."[57] In the words of another observer:

> *"Federal insurance of bank deposits, even to this day, has not been given full credit for the revolution that it has worked in the nation's banking structure. With this one piece of legislation the fear which operated so efficiently to transmit weakness was dissolved. As a result one grievous defect of the old system, by which failure begot failure, was cured. Rarely has so much been accomplished by a single law."* [58]

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54 It is interesting to note that Senator Glass apparently was not very familiar with the Securities Act of 1933 and displayed little interest in the legislation. *See* J. Seligman, *The Transformation of Wall Street*, 69 (1982).

55 *See, e.g.*, S. Rep. 71 Hearings, note 2 *supra*, at 1054.

56 *See, e.g.*, P. Temin, *Did Monetary Forces Cause the Great Depression?*, 91-94 (1976); Perkins, note 1 *supra*, at 496-97; Warner, "Biggest Bank Failure," *Fortune*, 62 (Mar. 1933). In recent testimony before Congress, the Securities Industry Association cited examples of bank securities affiliates that incurred substantial losses. Richard H. Jenrette, Chairman, Securities Industry Association, Statement Before the Senate Comm. on Banking, Housing and Urban Affairs (Mar. 7, 1984). The examples were drawn from testimony at the Stock Exchange Practices Hearings, note 33 *supra*, in late 1933 and 1934. It is not clear that the losses were attributable to conventional underwriting or dealing activities. Although available information is limited, it is likely that the losses were attributable in large measure to depreciation in the affiliates' long-term investment portfolios. *See, e.g.*, Stock Exchange Practices Hearings, note 33 *supra*, at 4981 (statement of Ferdinand Pecora, quoting the 1930 annual report to the stockholders of the Guardian Detroit Union Group) ("The Guardian Detroit Co. and Keane, Higbie & Co., in common with most securities companies and individual investors, have seen the market price of their inventory decline to a figure below values which should obtain under normal business conditions. This inventory might be divided into two general classes: First, securities which have been purchased for resale; second, securities which were purchased to give us a more or less permanent position, where we have a special interest, and which we expect to hold for institutional benefit, regardless of market fluctuations. Most of the depreciation in inventory values has occurred in this latter class of investments. From the standpoint of operations, that is, the purchase and sale of securities, both of these companies during 1930 made an operating profit").

57 M. Friedman & A. Schwartz, note 37 *supra*, at 434.

58 J. Galbraith, note 45 *supra*, at 170.

The elements of the Banking Act of 1933 that provided for a stronger Federal Reserve also were more important to insuring the stability of the commercial banking system than the Glass-Steagall provisions. As the President's Council of Economic Advisers has observed:

> *"Glass-Steagall now makes no important contribution to the protection of the public against bank failures or undue concentrations of economic power. Other government measures, such as Federal deposit insurance and broadened and strengthened Federal supervision, appear to have been more effective in that role."* [59]

Perceived problems with links between banks and securities affiliates The problems Congress thought were associated with relationships between commercial banks and securities affiliates were addressed more precisely by legislation other than the Glass-Steagall Act. Section 13 of the Banking Act of 1933 added a new section 23A to the Federal Reserve Act that imposed limitations on a member bank's transactions with its affiliates. This new section addressed concerns about potentially harmful securities and loan transactions between banks and their affiliates. By strictly limiting such transactions, the section also reduced substantially the possibility that depositor confidence in a bank might be shaken by the existence of an unprofitable affiliate. In addition, the provision addressed the fear that an affiliate, in the knowledge that it had access to a bank's resources, would make hazardous investments. Under the terms of the section, the affiliate's access to those resources was limited. Moreover, the use of an affiliate to manipulate the price of a bank's own stock was addressed by the Securities Exchange Act of 1934. By authorizing the Federal Reserve to regulate the extension of bank credit to purchasers of securities, this legislation also reduced to a considerable extent any difficulty banks might have had in insisting upon the maintenance of adequate margins on loans to customers to purchase securities distributed by the bank's affiliate. Finally, rules already established at the time of the passage of the Glass-Steagall Act addressed Congress' concern that the existence of a securities affiliate might affect adversely the independence with which fiduciary duties would be exercised by a bank's trust department.[60] In fact, during the debate on S. 4412 in May 1932, Senator Robert Bulkley pointed out that "[i]t is a long-established rule of English and American law that a trustee may not profit by dealing with his trust estate."[61]

Abuses in the marketing of securities There is no doubt that there were abuses in the marketing of securities during the 1920s. These objectionable practices, however, were not confined to the marketing activities of commercial banks. They were common to the securities industry as a whole. These general abuses, such as failures to disclose material information and market manipulation, were addressed by the Securities Act of 1933 and the Securities Exchange Act of 1934. Banks would be no more likely than investment banking houses to engage in those practices now.

Conclusion

The Glass-Steagall Act was not a finely tailored response to the problems confronting the banking system in 1933. In fact, the Act did not correct the basic structural defects that had led to the collapse of the banking system. These defects, as well as the problems and abuses Congress had identified in the marketing of securities and in the relationships between commercial banks and securities affiliates, were addressed far more precisely by legislative provisions other than those included in Glass-Steagall. While it is understandable that Congress was persuaded that financial abuses and the country's economic ills called for drastic action, the divorce of investment and commercial banking was an imprecise and overly broad legislative remedy.

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59 *Economic Report of the President*, 122 (1983).

60 *See generally* "Conflicts of interest" *infra*.

61 75 Cong. Rec. 9912 (daily ed. May 10, 1932) (statement of Sen. Bulkley). *See also, e.g., Albright v. Jefferson County Nat'l Bank*, 292 N.Y. 31, 40 (1944).

The CHAIRMAN. I hope Mr. Heimann will come up with his.

Mr. HEIMANN. I have no more conscious comments. [Laughter.]

The CHAIRMAN. Professor Levich, do you regard Glass-Steagall as affording worthwhile protection for the U.S. commercial banking industry?

Mr. LEVICH. No, I don't. I think we've observed that loopholes in Glass-Steagall are so substantial that U.S. commercial banks are already participating in underwriting securities, including equities offshore.

To that extent, they're already substantially in a business that Glass-Steagall—the spirit anyway—is meant to preclude them from participating in.

So it doesn't seem that it offers appropriate safeguards. If securities underwriting were risky and detrimental to the safety and soundness of U.S. banks, then you wonder why U.S. banks are allowed to participate in that business off shore.

The CHAIRMAN. I have one last zinger for Mr. Heimann.

Mr. Heimann, if banks should stay out of securities underwriting, why shouldn't securities firms stay out of banking? And if they should stay out of banking, why doesn't Merrill Lynch get rid of its depository institutions?

Mr. HEIMANN. Thank you very much, Mr. Chairman. [Laughter.]

I didn't say at any point in this hearing that I believed that Glass-Steagall should stay exactly the way it is. I would not wish to be misinterpreted. I believe it has to be changed. I want to make sure that the change is prudent, fair, correct and that it will work.

The CHAIRMAN. Will you add prompt to that?

Mr. HEIMANN. And very promptly, sir.

I think Mr. Mendoza made the point before that if we have a total breakdown in Glass-Steagall, which means commercial banks can underwrite corporate securities, then of course it would only be, I suppose, fair from the point of view of "the level playing field"—in quotes—that the securities houses would have the same commercial banking activities.

What's interesting and what gets lost in the debate is that I don't know of any securities houses that really want to be commercial banks. What they're interested in is limited commercial bank-like powers and I think that's absolutely correct. We are and they are.

I don't know if it makes sense for us to be a commercial bank. I don't think we ever would want to be one, to compete in the lending of money.

The point that Mr. Mendoza is making, which I have to agree with in terms of what's going on, is the lending of money has become much less safe and profitable and we've intermediated the lending of money through the capital market system.

I think that's the point Mr. Mendoza was making, if you've thought about it from a commercial banking point of view. It has to be fair, Senator. I don't believe there's any such thing as a level playing field because there's always some uneven places in it. There have to be.

But I come back to where I started out. Everything has to be rethought and re-evaluated, including the comments that you just

made, which are absolutely on the mark. And it has to be done so promptly.

The CHAIRMAN. Thank you, gentlemen. It's been a very stimulating and informative hearing. My compliments. Thank you. You've done a fine job.

The committee will stand in recess until tomorrow at 10 o'clock, when we resume hearings.

[Whereupon, at 12:05 p.m., the committee recessed, to reconvene at 10 a.m., Wednesday, October 14, 1987.]

CHANGES IN OUR FINANCIAL SYSTEM: GLOBALIZATION OF CAPITAL MARKETS AND SECURITIZATION OF CREDIT

WEDNESDAY, OCTOBER 14, 1987

U.S. SENATE,
COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS,
Washington, DC.

The committee met at 10 a.m., in room SD–538 of the Dirksen Senate Office Building, Senator William Proxmire (chairman of the committee) presiding.

Present: Senators Proxmire, Riegle, Sasser, Wirth, Garn, D'Amato, and Hecht.

OPENING STATEMENT OF CHAIRMAN PROXMIRE

The CHAIRMAN. The committee will come to order.

This morning's hearing is on the implications of new technology for structure and regulation of banking. I've encouraged the witnesses to discuss the trend toward securitization—a trend made possible by advances in data processing and communications technology.

Securitization is the process by which securities take the place of conventional loans, either by the substitution of loans for securities or by the conversion of loans into securities. Substitution occurs, for example, when a corporation decides to issue its own commercial paper instead of borrowing from a bank.

The mortgage-backed security is a prime example of how loans can be converted into securities. Traditionally, banks and thrifts held residential mortgage loans to maturity in their own portfolios. With mortgage-backed securities, by contrast, a large number of mortgages are combined into a pool, and securities representing fractional interests in the pool are sold to investors. The mortgages serve as collateral for the securities.

An increasing variety of debt instruments are being securitized, including car loans and credit card accounts receivable. Some people even propose to securitize the Third World debt.

Although securitization has much to recommend it, I'm concerned about its long-term competitive implications. Securitization transfers key functions of financial intermediation from an industry with low concentration (namely, commercial banking) to a highly concentrated industry (namely, investment banking). I note that in 1986, 70 percent of the total dollar volume of securitized debt was underwritten by just three investment banking firms.

The concentration of investment banking in the hands of a few firms facilitates anticompetitive behavior. I have to wonder what will happen as traditional lending declines and securitization be-

comes the norm: whether the market power of the investment banking industry will assert itself, underwriting margins will rise, and the public will be worse off.

Thus I believe it's important that we encourage competition in investment banking by removing unwarranted barriers to entry.

On October 2, I wrote the witnesses, inviting them to appear and indicating the kind of testimony that the committee was looking for, on the implications of the new technology for the structure and regulation of banking. I wrote that I was especially interested in hearing the witnesses views on whether it makes sense for Congress to retain the Glass-Steagall Act in view of the trend toward securitization—a trend made possible by advances in information technology.

We've gotten excellent advice from you gentlemen. I've had a chance to look at your statements and I've been very impressed by them. I must say that the 34-page statement by Mr. Bryan was a little longer than I was able to get through last night, although it's exciting and interesting and I read most of it. But there was also an exciting and interesting baseball game on last night. [Laughter.] One to nothing.

Now I'm going to handicap you gentlemen by asking you to confine your oral remarks to 10 minutes, so we'll have plenty of time for questions.

We have Mr. Lowell Bryan, director of McKinsey & Co., a management consulting firm that all of us know and greatly admire.

John Fisher, senior vice president of Banc One Corp. Banc One had the good judgment to move into our State. It did so by taking over one of our biggest banks, something over which I have very mixed feelings. But, nevertheless, I've heard marvelous things about the competence and efficiency of you and your fine organization.

Almarin Phillips, professor of economics and law, University of Pennsylvania. We're delighted to have Mr. Phillips.

David Taylor, group executive, Bank Administration Institute. And we're going to be joined a little later, by David Walker, professor of finance at Georgetown.

I mentioned yesterday that Senator Garn had been a pioneer in this area. He held hearings last February 1986, on Glass-Steagall reform, and he's been way out in front of us in a lot of areas. I'm delighted to recognize Senator Garn.

OPENING STATEMENT OF SENATOR GARN

Senator GARN. Thank you. I'd like to commend you, Mr. Chairman, for holding this hearing on the effect of technological change in banking regulation. Like yesterday's hearing on the globalization of capital markets, this is a subject that, as you mentioned, I've long had an interest in.

As the chairman knows, during 1985, this committee had a series of similar hearings that focused on securitization and its tremendous impact on the marketplace. That was over 2 years ago.

Since then, the business has grown dramatically. Those hearings showed and the marketplace continues to show that the financial

services world is surging ahead while Congress is still standing in place.

Today's testimony makes this same point loud and clear. Technology is making it less expensive to deliver financial services to customers and easier for other financial institutions to compete with banks.

At the same time, banks are unable to take full advantage of these new technologies because of a set of laws that Congress passed without any conception of the changes that would take place in the marketplace.

These laws stop banks from competing to deliver financial services even more cheaply to consumers. They also permit bank competitors to take away some of the best customers that banks have, leaving them with much more risky portfolios.

I strongly support the chairman in holding yesterday's and today's hearings and, frankly, I sympathize with him. It's not easy to wake people up to the truly radical changes that have occurred in the financial markets both at home and overseas.

We hammered these points over and over again during the last several Congresses and made some headway but, unfortunately, not nearly enough.

Congress has yet to produce any comprehensive solution. We need to do that soon. This is particularly true in the banking and securities area, as today's testimony on securitization clearly shows.

I support the chairman's recent efforts to take a new look at provisions in the Glass-Steagall Act. I think we both believe that we need to make financial firms more competitive in this area. It's time to change some of the prehistoric regulatory structure that threatens to turn some of our best financial competitors into dinosaurs.

Let me make one final point. While change is obviously necessary, I will not support efforts that some in the Congress are proposing to reregulate the marketplace by imposing new and unnecessary restrictions in the name of reform.

That is part of the problem and we should correct it, not make it worse. I'll work very hard in the days ahead to help the chairman achieve a proper balance between competition and appropriate safeguards. I'm certainly hopeful that the chairman will be able to have a bill ready to submit for the end of this Congress—hopeful that we might hold hearings and even get to a markup before the end of this year.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Garn. I have a copy of the major provisions of our bill here, and I plan to introduce it before long. And I commend you once again for the excellent pioneering work you did.

Senator Hecht.

Senator HECHT. No statement. Thank you.

The CHAIRMAN. Senator D'Amato.

Senator D'AMATO. Mr. Chairman, I'd like to have the opportunity to submit a statement for the record, and certainly not take the time of the committee to read that.

The CHAIRMAN. Without objection, so ordered.

The CHAIRMAN. Senator Bond.

Senator BOND. Thank you, Mr. Chairman.

I commend you on the fine series of hearings that you've had in the past few months on the future of the financial services industry. And I think these hearings have been very stimulating and comprehensive and I believe that we've come a long way in our understanding of these issues.

We've seen a number of themes running through the testimony. One is that we no longer have the luxury of considering banking issues in a domestic vacuum insulated from changes going on in the rest of the world.

Computers and telecommunications equipment inextricably linked us in world financial markets. And if we want to maintain our presence as a major player in the international capital markets, U.S. laws need to be updated and adequate regulation needs to be in place to allow U.S. financial institutions to do at home what they can already do abroad.

And, Mr. Chairman, I'll follow the example of my colleagues to my left and submit the remainder of my statement for the record.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Bond. I also have statements for the record of Senators Dixon, Sasser, and Shelby.

STATEMENT OF SENATOR CHRISTOPHER S. BOND

Senator BOND. Mr. Chairman, I'd like to commend you on the fine series of hearings that we've had in the past few months on the future of the financial services industry. The hearings have been stimulating and comprehensive and I believe that we have come a long way in our understanding of these issues.

There seem to be several themes which have run through all of the testimony which we have heard. One is that we no longer have the luxury of considering banking issues in a domestic vacuum, insulated from changes in the rest of the world. Computers and telecommunications equipment have inextricably linked us to the world financial markets. If we want to maintain our presence as a major player in the international capital markets, U.S. laws need to be updated to allow U.S. financial insitutions to do at home what they can already do abroad.

That being said, we do need to bear in mind that there are some steps we need to take to ensure the safety and soundness of the system. Deregulation without proper supervision and regulation could bring us another FSLIC disaster. We must insulate the insured depository from the other activities of the holding company and give the regulators the tools they need to stop problems before they get out of hand. If members of the committee are not satisfied that the depository can be completely insulated, perhaps we need to consider changes in our deposit insurance system. Some have sugested that banks be given the option to give up their Government sponsored deposit insurance if they wish to engage in riskier activities. I am not convinced that this extreme step is necessary; I mention it only as one of the options open to this committee.

These hearings have convinced me that there is much more at stake here than just a turf fight between some protected domestic

industries. The decisions we make or refuse to make here will have long term consequences both for our domestic economy and the world's financial markets. I commend the chairman for moving the committee in the direction we need to go, and I will do what I can to help him move this process along.

I look forward to the testimony of the witnesses.

Thank you, Mr. Chairman.

STATEMENT OF SENATOR ALAN DIXON

Senator DIXON. I am pleased to be here this morning as the Banking Committee examines the implications of new technology for banking regulation. We have an excellent group of witnesses before us today, and I look forward to their testimony. I want to take particular note of the fact that there is a distinguished Illinoisan testifying today—David Taylor—and I want to take this opportunity to welcome him to the committee and to commend his remarks to my colleagues.

The revolution in computer and communications technologies have had a great impact on the banking system. They have made the blizzard of innovative new financial products possible. These changes have been a mixed blessing for our Nation's depository institutions. However, on the one hand, they have made it possible for banks and thrifts to sell home mortgages to people who create mortgage-backed securities, for example, which can help these institutions better control their balance sheets. On the other hand, the current regulatory system often makes it difficult, if not impossible, for banks to create and offer these new products themselves.

The result is that banks are steadily losing market share to other segments of the financial services industry. While I do not believe that banks are entitled to any particular market share, I do believe they should have an equitable opportunity to compete. Given the essential role the banking system plays in our economy, they must have that opportunity.

I hope this morning's witnesses will offer us recommendation's, therefore, that will help us as we move forward toward long overdue reforms.

Thank you, Mr. Chairman.

STATEMENT OF SENATOR JIM SASSER

Senator SASSER. Mr. Chairman, I am pleased that we are continuing the hearing process and our comprehensive review of the financial services industry. Certainly, no changes in financial services have been so dramatic as those involving technological innovations. How many people, 15 or so years ago, ever heard of an automatic teller machine? Now 200 million Americans are using them for everyday banking transactions—they seldom see the inside of a bank.

Likewise, securitization of assets is a financial innovation that is dramatically altering the banking business in this country. Mortgage-backed securities have been tremendously successful products, and now the trend is spreading to auto loans, consumer receivables and student loans. I am particularly interested in learning how community banks can benefit, if indeed they can, from the securiti-

zation process. I am concerned that many of the legislative changes that we are considering could be of little help to smaller banks so I'd like to find out about securitization—something the small banks could do under existing law.

Mr. Chairman, there is obviously much going on that this committee needs to learn more about. I am looking forward to today's testimony.

Thank you, Mr. Chairman.

STATEMENT OF SENATOR RICHARD SHELBY

Senator SHELBY. Mr. Chairman, I commend your leadership for calling a hearing on this topic today.

There is no doubt that the impact of technology on the financial services industry has been substantial. Yesterday we were told that computers and communications technology share a primary responsibility for the globalization of capital markets. Certainly, without such technological innovation, the rapid innovation in the financial services industry would be impossible.

The progress that has been made in technology cannot be ignored or reversed. It is this situation that most plaintively suggests that a revamping of governmental restrictions is necessary. We do not want to impede the market nor render inefficient the advances, both in technology and in financial services, that have been made. For this reason, it is important that we recognize and respond to the new role that technology plays. We welcome the information and ideas that you, as experts in this subject, can provide us. Thank you for joining us today.

Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Bryan, go right ahead, sir.

STATEMENT OF LOWELL L. BRYAN, McKINSEY & CO., INC.

Mr. BRYAN. Thank you.

I'd like to confine my testimony mostly to securitized credit as opposed to securitization in general. Securitization is the tendency for financial assets to be securities rather than loans. Securitized credit is the process of literally converting loans into securities.

Since this process is literally combining the banking and securities functions, I'd like to confine my summary remarks to this subject.

SECURITIZED CREDIT

Securitized credit is a new, superior technology for extending credit. Just as vacuum tubes were replaced by transistors and transistors were then replaced by integrated circuits, securitized credit is beginning to replace the traditional lending system.

But, instead of a technology transforming the electronics industry, we are facing a technology which is transforming the financial services industry. Like other technological transformations, this one will take place over years, not overnight. We estimate it will take 10-15 years for this new technology to displace completely the classic banking system—not a long time to replace a system whose fundamentals have remained essentially unchanged since the Middle Ages.

When the electronics industry was transformed, some players who could not adopt to the new technology lost out, although the public was, in general, better off. In this financial transformation though, there could be further reaching casualties. The players dependent upon the old technology—commercial banks and thrifts—underpin our national economy. So, if they are threatened, we are all exposed.

This is why we have to manage the transformation here very carefully. If we do it right, we will create a sounder, more effective financial system that benefits us all. If we do it wrong, we'll make an already bad situation far worse.

The longer we have thought about it, the more convinced we have become that securitized credit is a superior technology. We feared it at first because of the potential to take good assets off the balance sheet of banks who already face a shortage of high-quality assets.

But, the more we have examined the issues, the more we have become convinced that it's traditional depository system and the laws and structures regulating it that are the fundamental problem.

In contrast, securitized credit, far from threatening the well-being of well-managed commercial banks and thrifts could enable them to prosper provided that individual depository institutions embrace the new technology, and provided that law and regulations change to encourage their participation and the infrastructure is built, including the regulatory infrastructure to ensure the new technology evolves in a safe and sound manner.

Many regulators and observers have watched securitized credit grow, but they remain very skeptical about it. Indeed, they fear it can make a bad situation worse. They rightly cite the EPIC transaction of 1985 as an example of how poorly underwritten securitized credit transactions can get into trouble.

If too many deals are poorly underwritten and if large defaults and losses result, this promising new technology could, at worst, hasten a credit collapse.

We must build credit underwriting service and collection skills into the new securitized credit system and simultaneously correct flaws in the existing system.

In fact, if we take the action that is needed, we can create a system that provides for better credit underwriting and for better credit diversification than the existing system.

Securitized credit is obviously not growing up in a vacuum, but rather is being overlaid on a financial system that has itself evolved over time.

TWO WEAKNESSES IN SYSTEM

Two aspects of that system are weak today. The first is the traditional credit system itself, which has suffered not only from the inroads of securitized credit, but also more fundamentally from some of the very regulations designed to protect it.

The second weakness is our regulatory framework for banking and securities, which has simply not kept pace with changes in technology and competition.

If the traditional credit system were strong now, we might all be tempted to protect it from the inroads of securitized credit. But, as you all know only too well, our credit system is breaking down. And many of our depository institutions are in real trouble.

I believe the source of the problems are the very deposit insurance safety nets that are designed to protect the public. Under these circumstances, I see credit securitization not as a threat to the traditional credit system, but as a means of strengthening it.

Moreover, our existing regulatory structure is also, I believe, inhibiting our ability to move forward with securitized credit. The United States and Japan, by far the two largest financial economies in the world, are the only two countries where barriers still exist to prevent the same holding company from owning both full line securities firms and commercial banks operating in the respective domestic markets.

This separation is becoming increasingly artificial as a combination of regulatory liberalization and financial innovation has enabled banks to engage in securities functions and for securities firms to engage in banking functions.

What do I think needs to be done?

One, in particular, I believe that the U.S. Government should first begin the orderly cleanup of the credit problems and unsound credit practices of the U.S. depository institutions.

Two, encourage risk to migrate outside of depository institutions. In effect, create risk-free depository institutions.

Three, allow financial holding companies to hold both depository institutions and a wide variety of other companies, including securities affiliates, credit risk insurance companies, and so forth.

Four, these subsidiaries function on an industry basis, but with an eye to making the marketplace work efficiently and effectively.

And, finally, rewrite laws and regulations specifically with securitized credit in mind.

I believe that such actions would create a better financial system. In particular, I believe it will provide for a safe financial system because it provides the potential to limit credit defaults without resorting to massive Government intervention.

As was pointed out earlier, the Government's safety net, while essential to protecting depositors, is a source of unsound lending practices in the country, since it permits incompetent lenders to lend money to borrowers who lack the capacity to service or repay the debt.

It is this very same safety net which has enabled the Nation to avoid the financial crashes that plagued our economy from the Nation's inception through the 1930's. The problem is that without the safety net, one major default can result in a daisy chain of defaults through the payment system.

That is, an otherwise sound institution can fail simply because some other institution defaulted, which then leads to that institution defaulting, which causes others to fail, and so forth.

Presently, it would be impossible for the Federal Reserve to allow any major bank to fail because the interdependence through the payment system is such that it would bring the whole system down.

It was this reality that has led to the bailouts of such institutions as Continental-Illinois, or more recently, First Houston.

One of the major advantages of securitized credit is that the special purpose vehicle is used to do the deals, can be used to isolate these individual transactions from all other risks.

Thus, even if a transaction is poorly underwritten, the resulting loss will not affect parties that did not participate in the transaction.

In other words, while today it is the Federal Government that ultimately must absorb the risk of a disastrous credit decision by a depository institution, in the future, the risk of a poorly underwritten securitized credit transaction can be borne by investors and credit enhancers. So there is no need for a Federal bailout.

Frankly, I believe that if legislators, regulators and participants embraced the securitized technology and practically take action to make it work effectively, we'll wind up with a far better, overall financial system.

Indeed, I believe it can provide a key to unlock the current legislated debate which is caught up in the issues of institutional self-interest versus the public good.

At the center of the debate are concerns about the soundness of the banking system and the thrift system about the potential costs to taxpayers of existing deposit insurance system, and about the difficulty of trying to keep securities and banking separate when the very process of credit securitization is making that separation impossible.

Do not get me wrong. I do not see securitized credit as a panacea for all the ills of the Nation's financial institution; it will not miraculously cure the existing problem loans of the Nation's commercial banks and thrifts, nor will it help poorly managed commercial banks or thrifts that lack the skills to compete.

Many of the advantages of securitized credit described in my testimony are only potential advantages. To realize the potential from this promising new technology will require action by regulators, legislators and participants.

Thank you, Mr. Chairman.

[The complete prepared statement of Lowell L. Bryan follows:]

SECURITIZED CREDIT

THE POTENTIAL FOR A SOUNDER, MORE EFFECTIVE FINANCIAL SYSTEM

Lowell L. Bryan

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Securitized credit is a new, superior technology for extending credit. Just as vacuum tubes were replaced by transistors, and transistors were then replaced by integrated circuits, securitized credit is beginning to replace the traditional lending system. But instead of a technology transforming the electronics industry, we are facing a technology which is transforming the financial services industry. Like other technological transformations, this one will take place over years, not overnight. We estimate it will take 10 to 15 years for this new technology to displace completely the classic banking system - not a long time to replace a system whose fundamentals have remained essentially unchanged since the Middle Ages.

When the electronics industry was transformed, some players who could not adapt to the new technology lost out - although the public was, in general, better off. In this financial transformation, though, there could be further-reaching casualties. The players dependent on the old technology - commercial banks and thrifts - underpin our national economy, so if they are threatened we are all exposed. This is why we have to manage the transformation here very carefully. If we do it right, we will create a sounder, more effective financial system that benefits us all. If we do it wrong, we will make an already bad situation far worse.

The longer we have thought about it, the more convinced we have become that securitized credit is a superior technology. We feared it at first because of its potential to take good assets off the balance sheets of banks, which already face a shortage of high-quality assets. But the more we have examined the issues, the more we have become convinced that it is the traditional depository system and the laws and structures regulating it that is the fundamental problem. In contrast, securitized credit, far from threatening the well-being of well-managed commercial banks and thrifts, could enable them to prosper - provided that:

1. Individual depository institutions embrace the new technology

2. Law and regulations change to encourage their participation

3. The infrastructure is built (including the regulatory infrastructure) to ensure that the new technology evolves in a safe and sound manner.

I would like to begin my testimony by first describing how the new technology works and why the players who have tried it prefer it to traditional lending. Next, I will make some observations about the flaws in our existing system and how the new technology can help create the potential for a sounder, more effective financial system. Next, I will describe some of the actions that I believe need to be taken to ensure that we all benefit from the new technology. Finally, I will describe how the technology can benefit all well-run existing players - including, for example, small commercial banks

and thrifts - and how the new technology can provide the foundation for a better financial system.

SECURITIZED CREDIT: THE MAJOR TECHNOLOGY FOR MAJOR LENDING

Securitized credit is a hybrid form of financing which combines features of two well-developed systems: the traditional credit system and the securities system. There is considerable confusion over terminology, even among the participants, so I should begin by defining my terms. When I say "securitization," I mean the trend toward financial assets being securities rather than loans. When I say "securitized credit," I mean the form of securitization in which loans are literally converted into securities. Securitization can take place without credit securitization. For example, commercial paper issuance is a form of securitization not involving the literal conversion of loans into securities. Most of my testimony will be on credit securitization. But that new technology is easier to understand if you know what it sprang from. Thus, let me first give a brief description of the traditional credit and securities systems.

Since its origins in medieval Europe, lending has been a relatively straightforward business. Ever since money changers and goldsmiths began accepting funds for safekeeping and lending out the idle cash to credit worthy borrowers, the fundamentals of banking have remained the same. Banks have provided depositors with safe, liquid instruments in which to invest their funds and have taken those funds and lent them to borrowers. In the process, banks absorbed the credit risk inherent in any lending process. Safety to depositors was provided by the bank's capital or, more recently, by government backing in the form of deposit insurance or other support. Other lenders - e.g., consumer and commercial finance companies - have employed the same basic business system except that they raised funds either by issuing securities or borrowing from banks instead of accepting deposits. One of the chief advantages of the traditional credit system is the close personal relationships that often develop between the borrower and the lender; these relationships are particularly important for small borrowers.

As you know, the securities system was separated from the commercial banking system in this country in the 1930s. Debt securities, of course, differ from loans made by banks in that the debt is issued - i.e., the debt instruments are sold to the public at large and are then traded among investors until the issue is redeemed by the issuer according to the terms of the original issue. Over the last decade, much of the borrowing that traditionally has been through the credit system has been migrating to the securities system because securities are inherently a more efficient, more cost-effective method of borrowing.

Why are they more cost-effective? We can trace that back to the source of funds, the third-party investors. For investors, debt securities have many advantages over loans. Securities are liquid and tradeable while loans are illiquid - i.e., there is only a very limited secondary market for most loans. The value of a debt security is determined by the market while the value of a loan is based upon subjective valuation - e.g., What is the real value of a loan made to Mexico - book value, 50 percent of book, 70 percent of book? Debt securities are also attractive to the large classes of investors - e.g., individuals and pension funds - who have little ability or appetite for assessing credit risks - i.e., rating agencies assess the credit risk for investors. Loans, on the other hand, have substantial credit risk and require significant skill in assessing creditworthiness and working out problem loans to avoid large losses. For all of these reasons, nonbank investors have rarely invested in loans. They prefer securities.

Because of these advantages to investors, borrowers who raise money through securities have lower financing costs. This is particularly true because debt securities have lower all-in costs than do loans. The total costs of intermediating a collateralized mortgage obligation bond (one of the many types of mortgage-backed securities) including underwriting costs, market-making costs, and issuing costs (lawyers, accountants, rating agency fees) are about 0.25 percent per year over the life of the bond, while the same size portfolio of residential mortgages held by a commercial bank has a total annual average intermediary cost - e.g., equity costs, income taxes, FDIC insurance of about 1.5 percent per year just to hold the asset on the bank's balance sheet. In other words, for a U.S. commercial bank, significant costs must be incurred to pay commercial bank shareholders, the Internal Revenue Service, the Federal Reserve system, and the Federal Deposit Insurance Corporation that, for securitized transactions, can be eliminated. These savings can be used to reduce costs to borrowers, to increase yields paid to investors, or to improve profitability.

Traditionally, however, no matter how attractive it has been to issue debt securities, only a fraction of all borrowers have been able to tap into the securities market. Traditionally, the only borrowers who were eligible for the securities market were borrowers whose creditworthiness could be assessed by outside rating agencies or who had name recognition, and who were of a sufficient size to create issues large enough to meet investors' needs for liquidity - i.e., today an issue needs to be in the $100 million-plus size to be called liquid. Indeed, almost all securities have historically been issued by governments - i.e., federal, state, and local - and by large, investment grade, corporations. This has meant that all borrowers requiring credit risk assessment and credit risk absorption by intermediaries, as well as all small borrowers, no matter now creditworthy, were excluded from issuing debt securities. Effectively, this meant that the debt needs of all individuals and all midsized and smaller corporations have, historically, been ineligible from being met through debt securities.

Because of the significant advantages of securities over loans, those investment grade private borrowers - i.e., large, high-quality corporations - who have traditionally been eligible to issue debt securities have indeed chosen to be active issuers of debt securities and have borrowed little money from commercial banks in recent years. For example, the average outstanding commercial paper issued in the United States has grown from $190 billion to $360 billion since 1983. Recently, a number of players have been working hard to extend the benefits of securitization to borrowers that do not meet the traditional criteria - and in the process have changed the risk profile of securities. For example, new issues of junk bonds grew from $3 billion a year in 1982 to $34 billion a year in 1986. These debt securities have the credit risk of loans.

At the same time, some traditional lenders have begun to treat some of their loans like securities. The excess capacity created by the large number of banks and investors willing to lend to large, high-grade corporations has created razor-thin spreads - i.e., under 1/4 of 1 percent. These low spreads, in combination with increasing capital requirements from U.S. regulators (who are worried about bad loans to developing nations and farmers) have made it impossible for U.S. commercial banks to lend money to high-grade corporations and earn reasonable returns on their shareholders' capital. As a result, banks have been looking for ways to satisfy their borrowers' credit needs without putting loans on their balance sheet. For example, major U.S. banks have sold many loans outright to other institutions. Loan sales in just the United States grew from almost non-existent outstandings in 1982 to about $35 billion by the end of 1986.

Thus securitization has been expanding in that more and more financial assets are becoming securities rather than loans. There are limits to how far securitization can proceed, however. For example, we estimate that there are approximately $4.4 trillion of loans outstanding on the balance sheets of all U.S. depository institutions, finance companies, and corporations - i.e., even corporations make loans - largely through trade receivables - which cannot be securitized using traditional technique. Most of these loans are to individuals and to midsized and smaller corporations. Before these assets can be removed from the balance sheets of depository institutions, finance companies, and corporations, these loans must be literally converted into securities through securitized credit. The remainder of my testimony is about this new technology.

How Securitized Credit Works

Securitized credit combines elements of traditional lending with elements of traditional securities and involves processes and structures that neither traditional system ever conceived of (Exhibit I). Under the traditional lending system, the same institution - i.e., whether a commercial bank, a thrift, or a finance company - would originate the loan, structure the terms,

absorb the credit risk, fund the asset, and service the collection of principal payments and interest. Under the new system, several different institutions might be involved, each of which might play different functional roles. For example, in extending credit under the new system, one institution could originate the loan, a second institution (probably an investment bank) could structure the transaction into a security, a third institution could insure the credit risk, a fourth institution could place the security with an investor and trade the security in the secondary market and, finally, a fifth institution could service the underlying loans.

Securitized credit is an outgrowth of a U.S. government-backed mortgage pass-through program started in the mid-1970s, whereby residential mortgages were first pooled together, then guaranteed by the U.S. government and then sold as securities to end investors by securities firms.

The driving force behind this new technology over the last several years has been the U.S. investment banking industry (particularly First Boston, Salomon Brothers, and more recently such players as Merrill Lynch and Goldman Sachs). It developed the technology for government-guaranteed mortgages and then used it to securitize privately issued residential mortgages, commercial mortgages, automobile loans, credit card receivables, and even commercial loans and lease receivables (and work is being done now on other classes of assets). Obviously, the incentives for the investment banks are substantial underwriting fees and trading profits. When loans that would have ordinarily been on the balance sheets of banks are converted into securities, investment banks can earn underwriting fees and trading profits not just from traditional debt securities issuers - i.e., large corporations, municipal and state governments and the federal government - but from the borrowings of individuals, midsized companies, small businesses, and private companies as well.

There are four financial innovations that investment bankers have used to convert loans into securities and to make the resulting securities more valuable.

1. Special purpose vehicles. A special purpose vehicle is a trust or corporation that has been established for the sole purpose of owning the loans; the special purpose vehicle then issues securities which are bought by investors. The exact form of the special purpose vehicle depends on the specific nature and risks of the assets; relevant legal, regulatory, and tax issues; and the objectives of the fundsraiser. The purpose of the special purpose vehicle is to isolate the risks inherent in the loans placed in the vehicle from all the other risks of the fundsraiser.

2. Pooling of borrowers. Through the special purpose vehicle, loans to different borrowers are pooled together in order to reach the minimum size - i.e., roughly $100 million - necessary to be able to justify a public

securities issue. In addition, this pooling allows the credit risk to be diversified.

3. Credit structuring and enhancement. When a pool of loans and the collateral for the loans are segregated in a special purpose vehicle, a credit underwriter (e.g., a commercial bank, a finance company, or an insurance company) can assess and underwrite the credit risk in that specific pool of loans, and then guarantee the credit risk. Such a guarantee can raise the credit risk of the pool to investment grade levels. This in turn allows the large classes of investors - e.g., individuals, pension funds - who have neither the skill nor the desire to assess credit risk - to invest in the securities issued by the special purpose vehicle. In many cases, the careful structuring of the transaction is sufficient to allow the issue to be rated by a rating agency. In that case no additional credit guarantee is required.

4. Repackaging of cash flows. In some cases the special purpose vehicle has repackaged the cash flows from the loans. For example, a collateralized mortgage obligation (CMO) is a special purpose vehicle structure that has been used to purchase mortgage loans and then issue tranches of varying maturity (e.g., a fast pay, a medium pay, and a slow pay tranche) backed by the underlying loans. Each of these tranches has a different expected life that reflects the expected prepayment patterns of the underlying mortgages. As the loans are paid off by borrowers, the principal first goes to the first tranche until it is paid off, then the second tranche is paid off, and so forth.

This structure enables the packager (usually an investment bank) to tailor the cash flows of the different tranches to appeal to particular investor preferences. In a CMO, a thrift might purchase a shorter tranche, while a longer-term investor like a pension fund might purchase a longer trance. This repackaging of cash flows also allows the packagers to create tranches with different prepayment risk characteristics.

Three examples, starting with a simple one and moving to more complex ones, will help illustrate how these financial innovations make the securitization of credit possible.

In September 1985, Franklin Savings (in a transaction very similar to many other mortgage-backed bonds issued by other thrifts) sold $100 million in U.S. government-guaranteed loans to a special purpose trust which issued 6-year bonds. The bonds were overcollateralized. Salomon underwrote the issue. In this case, the credit structuring (i.e., overcollateralization of the bonds) enabled the issue to be rated AAA.

In December 1985, Olympia & York (a large owner of commercial real estate properties) placed a mortgage on its building located at 59 Maiden Lane in New York City. They created a special purpose trust and issued a 10-year bond for $200 million, which provided annual interest payments and

would pay the principal back entirely, in a single payment, at the end of the tenth year. The mortgage and lease payments were used as collateral. The leases for 90 percent of the space leased by tenants (much of which represented quasigovernment risk) expired after the maturity of the bond. Aetna Insurance guaranteed $30 million in interest payments to investors. The combination of the structuring of the credit and the guarantee enabled the issue to be rated AAA. The issue was underwritten by Salomon Brothers International.

In October 1986, the automobile financing arm for General Motors (GMAC) initiated the largest financial transaction ever completed by a single private issuer - a $4 billion new issue, backed by low-interest rate - i.e., under 5 percent - consumer loans that had been used by GMAC to promote the sale of new automobiles. In this transaction, First Boston, who packaged and underwrote the deal, created a new corporation - a special purpose vehicle called the Asset Backed Securities Corporation (ABSC) - to purchase the automobile loans from GMAC and to issue notes to investors. The notes were issued in three tranches: a fast-pay, a medium-pay, and a slow-pay tranche. Investors were protected from the credit risk in several ways. First, GMAC provided a first loss guarantee of 5 percent (which was far in excess of GMAC's expected loss history on similar loans, which was under 1 percent). In addition, up to the $40 million in capital invested in the ABSC by First Boston provided an additional 1 percent protection. Finally, Credit Suisse (a AAA bank with a higher credit rating than GMAC's AA) put up a standby letter of credit - i.e., a guarantee to insure timely payment of principal and interest - to back up the 6 percent first loss credit guarantee by GMAC and ABSC. This combination of credit enhancement enabled the security to be rated AAA by Standard and Poor's.

As you can see, these transactions can become mind-numbingly complex. These three examples were selected from literally thousands of structured securitized credit transactions that have been done in the last few years. Because of their complexity, they depend heavily on another kind of technology: computers. Computer systems have played a vital role in two ways.

1. These kinds of transactions would not even be possible without computers to keep track of cash flows and loan defaults from individual loans and to ensure that all participants get exactly the returns due them. To make this process work, each loan and interest payment must be tagged as it flows from the borrower, to the intermediary who made the loan, to the special purpose vehicle, to the end investor who bought the security. Moreover, all of these transfers must be documented in accordance with complex legal requirements to ensure that with each cash payment there is a proper transfer of both return and risk. Without sophisticated computers, all of this would be impossible.

2. Computer-based analysis of cash flows is critical to understanding the expected returns for all participants and is particularly important for understanding the credit risk and the prepayment risk inherent in the transactions. For example, some of the leading investment banks involved in this business have spent enormous energy analyzing the prepayment risks of different kinds of residential mortgages. Some of them, indeed, have analyzed the demographics of mortgage prepayments even down to prepayment patterns by postal zip code. These analyses enable them to structure the complex tranche structures that are often critical to these types of transactions.

How Fast Securitized Credit has Grown

As I mentioned earlier, loans that have already been converted through the securitized credit technology in the United States include government-insured mortgages, privately insured mortgages, automobile loans, credit card receivables, commercial mortgages, and even commercial loan receivables. The volume outstanding of mortgage-backed securities introduced in the mid-1970s is already very large (outstandings at the end of 1986 were approximately $600 billion). During 1987, we expect outstandings of mortgage-backed securities will grow another 20 to 30 percent to a total of over $700 billion. To put this $700 billion figure in perspective, it exceeds the total loans made by all commercial banks to all the nation's businesses - i.e., as of June 1987, total commercial and industrial loans of the entire commercial banking system totaled about $500 billion. While mortgage-backed securities were originally only issued by government-related entities, private issuers are becoming increasingly important. We estimate that in 1986 roughly 15 percent of the total mortgage-backed securities outstanding - i.e., $100 billion - were issued by private institutions (although most of the underlying mortgages are guaranteed by an agency of the federal government). During 1986, new mortgage-backed securities issues (both public and private) represented about two-thirds of all mortgage originations in that year. There were over 1,000 privately sponsored new issues in 1986 - that is, four every business day - for an annual volume of $67 billion. In 1981, there were only 17 new issues. Just as recently as 1984, there were only 267 new issues completed.

The securitization of nonmortgage loans through special purpose vehicles has only begun to take place, but it looks like volume is going to grow equally rapidly. Car loans, which were first securitized in 1984, grew from new issues totaling only $140 million in that year, to $1 billion in 1985, to $8.5 billion in 1986 (excluding several significantly sized private placements of structured securitized loans). In 1987, the number of issuers has expanded from essentially just GMAC to now include General Electric Credit, Republic Bank, Marine Midland, Chrysler Financial, and Mack (Truck)

Financial. And, in addition to First Boston and Salomon Brothers, investment bank underwriters include Goldman Sachs, Drexel Burnham, Shearson Lehman, Kidder Peabody, and even a commercial bank (Marine Midland).

Credit card receivables were securitized for essentially the first time in 1986 ($850 million). By the end of 1987, it appears that the volume of these kinds of receivables will have more than tripled. And the end is nowhere in sight. A large variety of players are now working hard to develop structures for securitizing nonstandardized residential mortgages, commercial and industrial loans, lease receivables, and commercial assets.

Despite all the growth, only about 31 percent of home mortgages, 4 percent of auto loans, 1 percent of commercial mortgages, and 1 percent of credit card loans in the United States had been securitized by the end of 1986 (Exhibit 3). All told, securitized loans represented $620 billion of outstandings by the end of 1986 - compared to the total of roughly $4.4 trillion in U.S. loans outstanding in 1986. We expect securitized credit to continue to make large inroads into loans in the years ahead, although a number of factors are slowing it down.

Some of these factors are the common growing pains of any financial service business: few people, much to learn. There is a real shortage of investment bankers and traders with the skills to structure and make markets in the new instruments. The volume has grown so fast that existing players are fully stretched and have little capacity to work on any but the largest, easiest-to-do transactions. It will take years before there are sufficient numbers of skilled individuals available to meet the needs.

And the people are still, by and large, feeling their way. As a result, it literally can take from 6 months to over a year of work with lawyers and accountants to iron out all the details before a new, very sophisticated, very complex financing can actually be underwritten and placed. While there is some learning curve in effect, every time an institution wants to issue a new instrument, it must invest multiple man-years of effort on working out the documentation and servicing procedures before it can begin to offer the new instrument to its customers.

Much of this time is needed to determine how the credit risk is to be structured and absorbed. Given the newness of the instruments, neither regulators nor rating agencies nor potential guarantors are exactly sure what rules should be followed. In the meantime, the ambiguity over what is possible or not is sufficiently large that many potentially securitizable transactions are being done conventionally. Often the need to obtain financing is too great to await the resolution of all the uncertainties.

A second factor that is holding back securitized credit - and I will be talking a lot more about this soon - is regulation and legal constraints.

Briefly, one of these is, of course, Glass-Steagall, the U.S. law separating commercial and investment banking. Glass-Steagall restrictions limit the ability of commercial banks to underwrite and make markets in most of these types of securities and, as a result, many are reluctant to simply hand over the business to a Salomon or a First Boston. Similarly, the approach GMAC has used to guarantee its automobile loans - i.e., recourse for the 5 percent first loss - has been foreclosed by regulators as an approach that commercial banks can use to securitize their own assets. This, again, will obviously slow down commercial bank participation in securitizing many of their own loans.

Despite these limits, we have little trouble imagining that within, say, the next 10 years, 60 percent or more of all new loans might well be transformed into securities. This is because the benefits that current players are enjoying - and the sheer superiority of the technology - are powerful forces for change.

Benefits to
Current Players

Let us first look at the players who are now participating enthusiastically in securitized credit lending business. Most are enjoying immediate advantages.

1. Benefits to issuing institutions. Issuing banks, thrifts, and finance companies who are selling loans to a special purpose vehicle benefit in many ways. One of the principal, immediate advantages is that they can free up equity capital that they would otherwise have to use to support the assets on their balance sheet. The actual credit risk implied by regulatory capital requirements for commercial banks - e.g., capital equal to 7 percent of the loan - or expected by rating agencies and the market for finance companies - e.g., 8 to 10 percent of the loan - is significantly higher than the actual, expected credit losses inherent in many types of high-quality loans.

For example, actual loan losses on a pool of car loans or single-family mortgage loans is likely to be under 1 percent of the principal amount of the loans over the life of the pool. Selling the assets to a special purpose vehicle, which in turn issues debt securities that are credit enhanced at a cost which reflects the actual credit risks inherent in the loan, eliminates the excess capital.

There are other advantages to the issuing institution. For example, the issuing institution is accessing a new funding source. Some institutions, such as GMAC, issue in such volume that they get significant benefits from using new instruments to tap new markets. Moreover, securitization enables the issuing institution to eliminate any interest rate risk it might incur by keeping the asset on its balance sheet. Many financial institutions are

mismatched, and securitization can become a cost-effective way of neutralizing the interest rate risk of having fixed-rate loans that are funded with floating-rate deposits or liabilities. Finally, the issuing institution is expanding the total volume of business it can do since capital becomes less of a constraint on growth.

In some cases, the securitized credit issue carries less credit risk than the issuing institution itself - i.e., in the case of a troubled commercial bank or thrift - the securitization of the credit provides the institution with access to credit with better terms and interest rates than it would have been able to get otherwise. For example, the Bank of America has been able to issue bonds backed by its credit card receivables at AAA rates, saving in the process 1.5 percent or more on its borrowing rates relative to issuing notes with a similar maturity directly. In this case the cash savings are more than sufficient; the capital cost savings and transfer of interest rate risk are simply additional benefits. A final potential benefit, which no one has yet tapped, is to use securitization to create new products, since credit securitization can free the institution from the constraint of its own balance sheet. U.S. commercial banks, for example, do not generally offer small businesses fixed-rate, medium-term loans. Small businesses, therefore, have to pay very high rates if they can even find someone to lend to them on a fixed-rate basis. However, if you can securitize the loans and transfer the interest rate risk, the bank may be able to create a product which the borrower needs and which still enables the bank to earn substantial returns without taking any interest rate risk.

2. Benefits for investment banks. For investment banks, the immediate opportunity from credit securitization is obvious: they can earn underwriting fees and trading profits by financing borrowing activity in which they were previously not involved. For example, it has been estimated that as much as 40 to 50 percent of Salomon Brothers' and First Boston's earnings over the last 3 or 4 years are from underwriting, market making, and trading mortgage-backed securities. This is in a market - residential mortgages - where investment bankers played no significant role prior to the mid-1970s. The more loans that are securitized, the better it is for securities firms almost by definition.

3. Benefits to guarantors of credit risk. For guarantors of the credit risk, if they have the skills to assess the credit risk, there is an opportunity to charge fees greater than expected losses without actually having to extend loans. The primary guarantors of credit risk (excluding the federal government, which is the real guarantor behind most mortgage debt that is securitized) are commercial banks (primarily foreign banks) and special purpose insurance companies. In many cases - e.g., the GMAC transaction - the issuing institution guarantees a portion of the debt.

4. Benefits to borrowers. In the short term, there is little immediate economic advantage in securitization to the underlying borrowers. In fact,

the securitization of their loans is often not even apparent to the borrower. In the early stages of securitization, lenders want to retain the savings from securitization for themselves.

However, over the longer term, as more and more credit is securitized, competition will force lenders to share the savings from securitization with borrowers and the borrowers, will eventually be able to borrow money more cheaply. Eventually, the real cost of borrowing could fall as much as 1 percent or more for many types of credit. If so, the eventual economic benefits to borrowers could be very large.

One major benefit that securitization is already providing borrowers is the increasing availability of credit with terms that lenders would not provide if they were forced to put the loans on their own balance sheets. This effect is most apparent with fixed-rate mortgage debt. Consumers greatly prefer fixed-rate mortgage debt over floating-rate debt. However, many lenders are reluctant to extend fixed-rate debt on their own balance sheets - particularly given their experience in the early 1980s, when the rates they paid on deposits rose rapidly, with short-term rates, while yields on their mortgage portfolio remained constant. Many institutions, including a very large number of thrifts, actually failed due to the extent of this mismatch. But, with mortgage-backed securities, lenders can now extend fixed-rate mortgage debt without taking any interest rate risk themselves. As a result, many more borrowers now have access to fixed-rate mortgage debt than they would have had otherwise.

5. Benefits to investors. For investors, the chief advantage of securitized credit is that it increases the volume and variety of the instruments from which they can choose to invest. In the $4 billion GMAC transaction described earlier, one of the tranches was specifically designed to fit the needs of money market mutual funds: there is a shortage of AAA, 1-year paper, and one tranche was tailored to provide investors with yields of 20 basis points more than they could earn on comparable investments. Given the intensity of the competition among investors for performance, which is one key to their ability to attract new funds, even modest yield increases provide significant incentives for them to invest.

Potential Benefits Of the Technology

Many regulators and observers have watched securitized credit grow and heard all these arguments for it before, but they remain very skeptical about this new technology. Indeed, they fear it can make a bad situation worse. They rightly cite the EPIC transaction of 1985 as an example of how a poorly underwritten securitized credit transaction can get into trouble. In this transaction, a private mortgage-backed security, built on a pool of mortgages on builders' homes and credit enhanced by a syndicate or mortgage

insurance companies, went into default. The insurance companies sustained large losses, the underwriters' reputations were tarnished, and investors faced an immediate loss of liquidity on these securities and potentially sizeable losses on their principal. It will take years before the actual losses are known. If too many deals are poorly underwritten and if large defaults and losses result, this promising new technology could, at worst, hasten a credit collapse.

We must build credit underwriting, servicing, and collection skills into the new securitized credit system and simultaneously correct flaws in the existing system.

Later on I will describe the actions that I believe would ensure that the system works effectively and soundly. Assuming for the moment that such actions are taken, the resulting system would be superior to the existing system. Specifically, I think a securitized system would beat traditional lending on five counts: First, it would have better economics. Second, it would ensure better credit underwriting. Third, it would provide for better credit risk diversification. Fourth, it would make assets more liquid. Fifth, it would transfer interest rate risk to players who are better equipped to handle it than banks are. Let me review these one at a time.

First, let us look at economics. As I mentioned earlier, the traditional credit system is very expensive, particularly for high-quality assets. Irrespective of all the other operating costs, banks have substantial intermediary costs which cannot be reduced under the current rules. Today, for a typical bank, these costs include about 20 basis points of cost for required reserves, about 10 basis points of cost for FDIC insurance, and over 1 percent in equity costs. In other words, all assets place on a bank's balance sheet must earn a minimum net interest spread of about 1.5 percent. These costs are on top of other operating costs and loan loss reserves. In other words, a bank must earn a pretax net interest spread of approximately 1.5 percent on its loans, net of operating costs and loan loss reserves, to keep its stock price equal to its book value. In truth, the average commercial bank in this country has not, for the last several years, been able to meet this test. Bankers are not, on average, recovering their equity costs - which is why many bank stocks sell below book value even in today's bull market.

As mentioned earlier, credit securitization is more cost effective because it saves FDIC insurance costs, reserve costs, and excess capital costs for all assets where regulatory capital requirements are too high for the real credit risks in high-quality loans. For example, as mentioned earlier, actual loan losses on a pool of high-quality car loans are likely to amount to about 1 percent of the assets over the life of the loans. In a properly structured securitized credit transaction, the capital back-up required for credit enhancement would be tailored to this specific level of credit risk, with a corresponding saving in capital costs. For most properly structured, high-quality credits, this backup should not be much more than

conventional loan loss reserves - perhaps 1.5 to 2.0 percent. In contrast, the average bank today maintains over 7.0 percent of its loan outstandings in the form of loan loss reserves and equity capital.

A second advantage of securitized credit is that it should only be possible to securitize loans in which the credit underwriting is sound - i.e., where the price charged for taking credit risk is less than the expected credit losses. To ensure sound credit underwriting, we must demand that the originator of every securitized credit deal retain at least the expected loss on the securitized loans; the system will not work unless the loan originator is motivated to underwrite the credit properly and to service the underlying loans. For most high-quality assets, this means that the originator will need to guarantee at least two or three times the expected credit loss on the asset. In other words, if the maximum expected loss on the portfolio is 1 percent, we would expect the originator to guarantee the first loss at least that amount (Exhibit 7). This system should ensure sounder credit underwriting than in the normal lending process.

This is because the originating institution has to deal with an outside credit enhancer that reviews the credit assessment skills, servicing capacity, documentation, etc., of the orginating institution before agreeing to participate. Credit enhancers are far less likely to have community or customer class biases than local commercial banks, who are likely to be overly optimistic about the health of the local economy or the creditworthiness of a local borrower. Further, credit enhancers should have strong economic incentives to work with originating institutions to improve originators' credit skills. And finally, in the securitized credit process, a rating agency looks over the shoulders of both the originator and the enhancer (Exhibit 6). Weak creditors will either have to improve their credit skills or be foreclosed from being able to securitize their loans. The net result is that credit underwriting through credit securitization should be far sounder than under the traditional system.

This technology should also lead to better diversification of credit risk. Theoretically, a bank's loan portfolio should be a good diversifier of credit risk, but experience has proven this theory false. In fact, the traditional credit system has led to two kinds of concentration of credit risk: first, credit risk is concentrated geographically; second, it is concentrated among a small percentage of weak institutions. Let us consider geographic concentration first.

Banks originate most of their loans wherever they happen to be located. Thus, most banks in Oklahoma have loan portfolios filled with loans to independent producers and farmers - partly because they were overoptimistic about the health of the local economy, and partly because they had few other lending opportunities. It is not surprising, therefore, that we now have a concentration of charge-offs in different regions of the

country. While banks in New England and the mid-Atlantic have been experiencing only marginal charge-offs, as will be noted later, banks in the West North Central and West South Central in 1986 have been charging off loans at a rate of about twice the national average.

Credit securitization will cause this credit risk to be diversified. While expected losses will be retained with the originator, catastrophe credit risk will be placed with a credit enhancer, and this in turn will probably be syndicated to other credit enhancers. In the process, catastrophe credit risk will be spread from the originating institution to credit enhancers, with any residual risk borne by investors - who further spread the risk by diversifying their portfolios. If this system had been in place in the early 1980s, it would have prevented the kind of regional concentration of credit charge-offs we are seeing now.

The fourth dimension in which securitized credit wins over the traditional system is liquidity. The traditional system produces illiquid assets. Banks make few short-term, self-liquidating loans these days. There is no secondary market for most loans, with the exception of the whole loan mortgage market. Once a loan is made to a borrower, the bank has limited ability to convert that loan back to cash until the borrower pays the bank back. This mean that banks can do little to adjust their loan portfolios for changing interest rate or local market conditions. Since economic volatility has become a way of life, this lack of liquidity makes banks more vulnerable than they need to be.

In contrast, securities are liquid. If a commercial bank had more such assets, its balance sheet would be far more liquid than at present. As a result, it could adjust its portfolio much more quickly to changing conditions. Other investors can, of course, either hold or sell credit securities just like any other security in their portfolios.

The fifth comparison I want to make between the traditional credit system and securitized credit is in terms of interest rate risk. Since 1980, interest-sensitive deposits have increased from about 50 percent of the total to about 75 percent of the total. Commercial banks have responded very intelligently to the increasing market rate sensitivity of the liability side of their balance sheets by making many more floating-rate loans.

The problem is, though, that floating-rate assets do not yield good margins. As a result, in order to increase earnings, many banks have begun to make interest rate bets of two types: first, discretionary bets involving fixed-rate investments in the investment portfolio and, second, fixed-rate assets generated in the course of doing banking business - i.e., the credit card book and the auto loan book on the consumer side. Banks, as highly leveraged institutions, are poorly structured to take significant interest rate risk. Even modest mismatches can lead to significant losses. We believe that the level of interest rate betting by banks raising interest

sensitive deposits and investing them in fixed-rate investments - that is, playing the yield curve - has now reached very significant proportions.

The securitized credit system enables banks to continue to offer fixed-rate loans to customers while choosing whether or not to take interest rate bets. If a bank chooses to securitize these loans, it can transfer fixed-rate interest risk to the end investor who is far better structured to take that risk. For example, pension funds or mutual funds are not leveraged institutions; they are, in effect, all equity. They are properly structured and managed to take market risk; indeed, they do it all the time.

To my mind, these advantages of securitization are very important, but they are by no means guaranteed. The new technology will not evolve this way all by itself, no matter how many investment bankers, investors, and borrowers want it to. Congress and regulators have to take some proactive steps to create an environment that will shape the development of securitized credit into a sounder system. That means first correcting some problems we have now.

FLAWS IN OUR EXISTING SYSTEM

Securitized credit is obviously not growing up in a vacuum, but rather being overlaid on a financial system that has itself evolved over time. Two aspects of that system are weak today. If they are not corrected, more than the future of securitized credit is at risk. The first is the traditional credit system itself, which has suffered not only from the inroads of securitized credit but also - more fundamentally - from some of the very regulations designed to protect it. The second is our regulatory framework, which has simply not kept pace with changes in technology and competition.

Credit System Weak

If the traditional credit system were strong now we might all be tempted to protect it from the inroads of securitized credit. But, as you all know only too well, our credit system is breaking down, and many of our depository institutions are in real trouble. Under these circumstances, I see credit securitization not as a threat to the traditional credit system but as a means of strengthening it.

Before the late 1970s, we had a sound and stable credit system. It was based on regulated deposit interest rates and other regulatory barriers - i.e., prohibitions against interstate banking - that limited competition. Institutions took deposits at approximately 5 percent and loaned money at higher rates, and thereby made good profits. But in the 1970s, when inflation rose and interest rates soared above the regulated deposit interest

ceilings, money market mutual funds siphoned massive amounts of money out of the deposits of banks and thrifts. From 1978 to 1982, money market mutual funds grew from under $10 billion in assets to over $200 billion. In late 1982, regulators removed the deposit interest rate ceilings, enabling banks and thrifts to compete for deposits once again by offering higher rates. The combination of high liquidity, high rates, and government agency insurance (FDIC for the banks, FSLIC for the thrifts) proved irresistible, and the money flowed back into the credit system. Deposits in money market deposit accounts alone grew from zero in 1982 to over $600 billion in 1986.

The change in laws had enabled deposit-taking institutions to compete for deposits, but had created only a partially competitive situation. All banks and thrifts could back up their deposits (up to $100,000 per deposit) with government insurance; individuals chose where to put their money not on the basis of which was the soundest bank, but which offered the highest interest rate. Too often, the highest bidder turned out to be an incompetent commercial bank or thrift. In some cases, savings and loans with less than $100 million in assets raised money through brokers and grew into multi-billion-dollar institutions in just a few years. These institutions then started lending aggressively. Because so many lenders were looking for business, prices were forced down, and institutions eager for volume often relaxed their quality and lending standards. Inevitably, the hungriest (and least prudent) institutions accepted borrowers whose financial condition was so risky that they should have been raising equity instead.

Even so, these borrowers were able to borrow at rates nearly the same as the good credits were paying. Our research supports this point and demonstrates that, overall, the commercial banking industry is clearly not able to charge borrowers for the credit risk they are taking. We have analyzed charge-off statistics for the entire commercial banking industry and have arrayed the industry by charge-off deciles - i.e., from best to worst. From this analysis we have found that all banks in each decile earn roughly the same net interest margin - about 4.5 percent (Exhibit 4). In other words, there is no additional net interest margin for taking additional credit risk. This is in sharp contrast to the junk bond market, where credit ratings and yields are closely correlated (Exhibit 5). When we netout the loan charge-offs, we discover that, in truth, loan charge-offs are inversely correlated (Exhibit 6). The higher the real credit risk taken, the worse the returns.

But why are returns inversely correlated? We believe it is because for the vast bulk of the industry's customers - consumers, small businesses, real estate developers, and midsized corporations - there are neither ratings nor common information sources which assess the quality of the risks being taken. While interest returns are determined by the micro-competitive environment of each local marketplace, credit losses are apparently determined by the relative skills of each individual institution in gathering credit information, underwriting credits, perfecting collateral, and collecting

delinquent loans. This leads to the worst credit risks migrating to the banks with the worst credit skills (since the banks with better skills refuse the credits). Now these borrowers are proving unable to repay their loans, and their lenders are watching paper profits turn into cash losses.

Simply stated, we have introduced intense competition into our financial system without making the necessary adjustments to our regulatory framework. We have allowed incompetent institutions, willing to pay the highest rates, to raise massive amounts of money with the backing of federal deposit insurance. As long as these conditions persist, we can expect many U.S. lenders to continue to take uneconomic credit risk - i.e., lending where the expected credit losses exceed the expected returns. In other words, borrowers will use the banks to raise funds with quasi-equity risks - e.g., leveraged buy-outs. The borrowers will keep the equity returns if the underlying project is successful, and the banks will take the losses if the underlying project is unsuccessful.

Supply has outstripped demand; too much capacity has been chasing too little quality credit. Financial institutions have been competing not only on price but on quality and lending standards.

Moreover, the credit problems have been concentrated in the weakest institutions. Those institutions with the poorest credit underwriting skills have often booked the greatest volume of bad loans. If the credit system were fully competitive, these weak players would never have been able to raise these deposits in such volumes. And once the institutions proved to be incompetent, they would not have been able to continue raising deposits but would have been allowed to fail. Instead, in the system as it operates today, most poorly managed institutions continue to raise funds with the backing of the federal government.

How bad is the existing situation? Charge-offs in the commercial banking system have grown alarmingly. In 1986, before any of the large LDC debt provisions of this year, the U.S. commercial banking industry charged off almost $17 billion in almost exclusively domestic debt. To put that number into perspective, in the 30 years between 1951 and 1980, the industry charged off a total of only $28 billion.

Moreover, the reported $17 billion figure probably underestimates the amount of uncollectable loans the banks actually held last year. Most loans are written off based on judgment rather than pure numbers, and banks are understandably reluctant to admit to themselves and the public that they have made bad lending decisions. The LDC debt was so visible that the public knew about it even though the banks had not recognized these losses. The domestic bad debt is better hidden, and some bankers have chosen to be slow to recognize emerging losses, hoping against hope that the loans would get better, not worse.

Despite the growth of charge-offs, the industry could cover them easily if all its earnings, loan loss reserves, and capital were available to absorb all its losses. In 1986, the almost 14,000 commercial banks in this country earned a total of $18 billion, and held roughly $21 billion in loan loss reserves and $173 billion in equity capital plus $25 billion in other capital. Thus, the total available protection was about 15 times charge-offs, if all this protection were available to absorb losses. But the capital and reserves of the strongest banks are not available to absorb the losses of the weakest. Each is expected to cover its own losses, and the losses of the weakest are overwhelming their available equity capital and loan loss reserves.

We calculate that about 11 percent of the commercial banks - 1,500 institutions in all - are in very weak financial condition. While the median bank now charges off 0.8 percent of its loans and leases in any given year, 10 percent of the commercial banks wrote off about 6 percent of loans and leases in 1986, while another 10 percent wrote off about 3 percent of loans. Put another way, banks that account for just 7 percent of the industry's assets accounted for 32 percent of its charge-offs last year.

It is not as easy to characterize these weak banks as some people think. If we examine any subgroup of banks, like farm banks, or other community/local banks, or even banks in geographic areas with high credit losses, we find that most of the members of the group are performing well, and a few (roughly 20 to 30 percent in most cases) are performing badly. For example, while it is true that some farm banks are troubled, 20 percent of farm banks by assets account for 54 percent of all the farm banks' charge-offs. Of the remaining community/local banks, 17 percent by assets account for 58 percent of the charge-offs of that group. In the West North Central, the region of the country with the highest charge-offs patterns, two-thirds of the banks have charge-offs of less than 2.2 percent of assets, and fully 40 percent have charge-offs of under 1.0 percent, while the worst 10 percent are charging off at a rate of more than 7.0 percent of assets. In one group of banks - the nation's 150 largest ones - charge-offs of the worst performers are less extreme. Even the worst 10 percent of these banks, whose names and credit problems have often appeared in newspaper headlines, have charge-off rates averaging only 2 percent. This is not surprising, since the large size of the loan portfolios of these banks helps diversify credit risk.

When we match concentrated charge-offs against capital, we see that industry-wide regulatory requirements are beside the point. In 1986, the strongest 70 percent of the industry had $173 billion in primary capital, but charge-offs of only $8 billion, i.e., their capital was 21 times greater than their charge-offs. In contrast, the weakest 10 percent of the industry had $7.6 billion in primary capital and charge-offs of $3.5 billion. You cannot charge off at the rate of half your capital per year for very long and stay in business - at least in most businesses.

As you know, the thrift industry is much weaker. The FSLIC is already technically insolvent, with a net worth of minus $6 billion. And since the tangible net worth of the savings and loan industry is only about 1.5 percent of its assets, $17 billion, there is very little cushion indeed.

As with the commercial banking industry, however, there are strong institutions and weak institutions. Roughly 40 percent of the industry is very solvent and has capital ratios roughly equal to those of the commercial banks. Another 30 percent, although significantly undercapitalized by commercial bank standards, are nonetheless still technically solvent - i.e., they have a positive net worth - although it remains to be seen how many would be so if their bad loans and low interest mortgages were marked to market prices.

The remaining 30 percent of institutions, some 916 in number, are already insolvent or are on the verge of becoming insolvent. Under Generally Accepted Accounting Principles (GAAP), 13 percent of the thrifts operating today have negative net worths - i.e., they are insolvent. Another 17 percent have extremely low net worths - i.e., between 0 and 3 percent. Since the GAAP net worth of thrifts typically includes a 3 percent value for intangibles like goodwill, which may have little or no market value, many of those low net worth thrifts are also actually insolvent on a tangible net worth basis.

You may well wonder how an insolvent thrift finds the cash necessary to continue operating and paying interest on deposits. Some keep their doors open by raising deposits - not to make loans or investments, but rather to pay interest on existing deposits.

This type of business was a moneymaker for Charles Ponzi in Boston from 1919 to 1920, but it is not a long-term winning strategy. Ponzi developed a scheme in which he promised an investor high rates on his money (40 percent for 45 days), then borrowed larger sums from later investors, took a cut, and used the remainder to pay the interest on the first deposit. This pyramid yielded high returns to Ponzi until The Boston Post blew the whistle on him, and he was indicted.

While the insolvent thrifts in the industry are not as blatant as Ponzi, the principle is the same - only in this case, the guarantor is the federal government, not Charles Ponzi. The longer the losing thrifts play this game, the more negative their net worth will become.

The insolvent thrifts have been able to speculate in this Ponzi game and in other equally unsound practices - like making very risky loans or taking interest rate gambles - simply because they have nothing to lose. If the risky ventures succeed, they may be able to generate a positive net worth for their shareholders. If the risky ventures fail, the only real loser

is the FSLIC insurance fund, which will have to cover the thrift's inability to repay its depositors. This perverse incentive that arises when an insolvent insured thrift is permitted to continue operating has been termed: "Heads I Win, Tails FSLIC Loses."

The longer insolvent thrifts are permitted to play these losing games, the greater their losses will be. For example, in 1984, there were only 15 thrifts operating with the very worst negative GAAP net worth, negative 12 percent or less. By 1985, there were 26 such thrifts, and by 1986, the number had soared to 74. This trend is not surprising, since roughly three-quarters of the GAAP insolvent thrifts also have negative annual earnings. As a result, the worth of these operating insolvent thrifts is deteriorating at an accelerating and frightening rate. In 1984, the negative net worth of the average operating insolvent thrift was negative 3.5 percent of assets. Two years later, this average negative net worth had grossly deteriorated to negative 8.5 percent (Exhibit 7).

Many of these weak thrifts are exposed not only to credit losses but also to significant interest rate risk. Many thrifts hold large amounts of long-term, fixed-rate mortgages and mortgage-backed securities, which they list on their balance sheets at the price they paid for them. Typically, the thrifts fund these mortgage assets with short-term, interest-rate-sensitive deposits. When interest rates go up, the thrifts are hit on both sides of their balance sheets. The market value of their mortgages and mortgage-backed securities goes down, and the price they must pay for their deposits goes up. This interest rate risk exposure of the thrifts is very serious. For example, during a recent month, mid-March to mid-April 1987, interest rates rose so fast that the principal value of many mortgage-backed securities dropped by 7 percent. Since the thrift industry holds about $135 billion of these securities, that could have reduced the value of the industry's assets by about $10 billion, which is 62 percent of the industry's total tangible net worth. While some thrifts may have guarded against some portion of this loss by hedging, the actual loss is likely to have been greater since the value of the thrifts' fixed-rate, whole-mortgage portfolios also declined.

This system is clearly breaking down. I think we need a better one.

Regulatory
Structure Outdated

I have already pointed out the connection between our regulatory safety nets and our existing credit problems. But our regulatory structure is also, I believe, inhibiting our ability to move forward with securitized credit.

The United States and Japan, by far the two largest financial economies in the world, are almost the only two countries where barriers still

exist that prevent the same holding company from owning both full-line securities firms and commercial banks operating in their respective domestic markets. This separation is becoming increasingly artificial as the combination of regulatory liberalization and financial innovation has enabled banks to engage in securities functions and for securities firms to engage in banking functions.

For example, the New York money center banks engage in loan sales (which looks like commercial paper) and discount brokerage (which often looks like full-service retail brokerage). They underwrite their own securitized credit transactions in the same syndicate as a normal investment bank, privately place huge debt transactions to a wide variety of institutional investors, sell mutual funds but do not sponsor them, and act as full-line securities firms all around the world, except in New York. Meanwhile, securities firms sponsor mutual funds with check writing privileges, trade foreign exchange, market home equity loans, and even provide bridge financing (taking enormous credit risk in the process) to close major corporate restructurings. The chief beneficiaries of the existing laws are: (1) the lawyers who ensure that the participants keep within the law, but nevertheless function as if the laws separating banking from securities did not exist; and (2) participants in particular niches who are protected by law from competition - e.g., salesmen of municipal revenue bonds.

The development of securitized credit puts even greater pressure on the existing regulatory structure. The banking and thrift regulators theoretically control the credit extension of commercial banks and thrifts, while the SEC regulates the securities industry. Securitized credit falls between the cracks; neither of these parties has the proper mandate to regulate it.

The existing laws have become obsolete in the new financial world. But their continued existence is adding risk and unneeded costs to the system. Commercial bankers, whose very franchise is being made obsolete through securitization, are becoming desperate and are responding by taking on increased credit risk. They are prevented by regulation from participating in securitized credit, where they could put their skills to good use. Consequently, unneeded capacity is being added by both securities firms and commercial banks in a financial services industry already plagued with overcapacity.

TAKE ACTIONS TO GAIN BENEFITS OF TECHNOLOGY

I would like to contribute some thoughts about how some laws and regulations need to change, both to guide the development of securitized credit and to strengthen the commercial banking and thrift systems that

should be playing a major role in this new technology. These ideas should be viewed as thought starters. Certainly, there is much more detailed thinking that needs to be done. Nevertheless, I believe the ideas should become part of the public debate. I am going to try to keep the description of the ideas short and to the point. In particular, I believe that the U.S. government should:

- Begin the orderly cleanup of the credit problems and unsound credit practices of U.S. depository institutions.
- Encourage risk to migrate outside of depository institutions.
- Allow financial holding companies to own both depository institutions and a wide variety of other companies including securities affiliates, credit risk insurance companies, etc.
- Regulate these subsidiaries functionally with an eye to making the marketplace work effectively and efficiently.
- Rewrite laws and regulations specifically with securitized credit in mind.

1. Clean up the credit problems and unsound credit practices in the United States. The credit problems in the United States are simply intolerable. The U.S. government needs to begin the cleanup by liquidating hopelessly insolvent thrifts in an orderly manner. The Federal Savings and Loan Insurance Company (FSLIC) has a negative net worth, and its $10.8 billion in new borrowing authority will not provide it with sufficient cash to liquidate all of even the most hopelessly insolvent institutions. While some of the necessary money can come from the insurance premiums from solvent thrifts, I believe the FSLIC is going to have to turn to the federal government for bailout funds. We estimate some $50 billion to $100 billion is needed. The U.S. taxpayer is already on the hook for these losses in the thrift industry. Indeed, the FSLIC bailout bill passed in July 1987 placed the full faith and credit of the U.S. government behind the insurance funds; this is just as well because major deposits defaults are one of the few ways we could ensure that we again experience financial crashes.

In comparison to the government's annual budget of $1 trillion, the cash needed for orderly liquidation of insolvent thrifts is modest: $15 billion to $20 billion a year for 3 to 5 years probably would be enough and would represent about 1.5 percent to 2.0 percent of the budget in any given year. Of course, the taxpayers' reaction to such an ongoing public bailout of private institutions would be negative, but it must be borne sooner or later. Time will not cure truly hopeless cases. The sooner we address the costs of liquidation, the lower will be the eventual costs. Thanks to the more conservative nature of commercial bank regulation, there are still enough resources

in the commercial banking system and the FDIC to liquidate insolvent commercial banks routinely; no public bailout is yet needed in this sector.

Liquidations of insolvent institutions would have the added benefit of reducing overcapacity in the entire commercial banking and thrift industries, thus improving the health of the remaining institutions.

U.S. regulators also need to be granted stop-lending powers. As the liquidation of insolvent banks and thrifts proceeds, it is important that the situation be actively managed so that new problem institutions do not emerge. Banks and thrifts with high charge-off rates and inadequate capital should be prevented from lending more money until they have brought in the necessary management skills and have been recapitalized. U.S. regulators should be empowered to impose a stop-lending rule whenever an institution crosses a predefined boundary line, such as equity of less than 2 percent of loans and leases, and charge-off rates over an 18-month period that are in the worst 15 percent of similar institutions.

This onetime cleanup needs to begin as soon as possible.

2. Encourage credit (and interest rate) risk to migrate outside the depository system. At the core of credit problems in the United States are the safety nets provided by the United States to its depositing institutions since, if depository institutions make bad credit judgments, the government winds up bailing them out. Yet safety nets must stay in place because defaults on deposits are intolerable. What then should be done?

In my view, the answer is to create a completely risk-free depository institution and payment system. In this system, the institution-taking deposits insured by the government would be allowed to invest these funds only in instruments with no credit risk, such as federal government obligations, securities rated AA or better, and no interest rate risk, such as floating-rate or short-term bonds and notes.

Under this approach, credit risk would be borne by nondepository institutions (including nondepository subsidiaries of holding companies also owning depository institutions). The nondepository institutions taking credit risk would not be entitled to federal insurance, and therefore would depend on investors for funds who demand high-quality financial skills and a good return. No longer would the government subsidize lending spreads; thus spreads on high-risk loans would rise until they reflected the underlying credit risk of the loans. Conversely, over time, the efficiencies of the new technology would lower the costs of loans with low credit risk.

Credit and interest rate risk would still exist, but it would not touch the depository system. The players involved would be separate subsidiaries of bank holding companies, as described below, or finance companies, or (to the extent that securitized credit takes hold) securitized credit

enhancers, including credit risk insurance companies, full-line insurance companies, and foreign banks. As described below, this credit-enhancement activity may well need to be regulated separately.

How can you encourage the migration of credit risk? Frankly, if only depository subsidiaries had to meet capital adequacy guidelines such as those under consideration already, and if other subsidiaries of the holding company were exempt from these guidelines, this migration would probably take place naturally.

3. Allow holding companies to own both depository institutions and a wide variety of other companies including securities affiliates, credit risk insurance companies, etc. While securitized credit may be rendering the classic banking business system obsolete, the nation needs the skills of its better-run commercial banks and thrifts more than ever. Many of these institutions have very strong skills. Indeed, most of the highly-skilled credit underwriters in the country are commercial banks. Moreover, as more and more of the flow of funds is securitized, the less and less sense it makes to prohibit these institutions from engaging in the securities businesses, particularly if credit risk migrates outside of depository institutions. Therefore, I believe that holding companies should be permitted to own both depository institutions and a wide variety of other subsidiaries including those engaged in all types of securities and insurance activities (particularly including credit insurance companies). If this were to happen, there would be no distinction between a bank and a non-bank-holding company. It would be possible for holding companies owning traditional securities or insurance companies to own depository institutions and for traditional bank holding companies to own securities and insurance companies.

4. Regulate subsidiaries functionally with an eye to making the marketplace work effectively and efficiently. Each functional kind of subsidiary - e.g, securities firm, insurance company, credit insurance company, depository institution - could be functionally regulated by an appropriate, specialized regulator. I believe the purpose of this regulation should be to make the market work effectively and efficiently. For example, the kind of regulation that is needed to make the securitized credit system work is regulation to ensure that participants make, and are provided with, full disclosure of information, that only competent players participate - i.e., excluding fly-by-night operators - that contracts are effective, that reserves and capital are adequate for the risks taken, that there is no fraud, and that the information that is disclosed is accurate (through an auditing process). Exhibit 9 lays out the kinds of functional regulations that are needed. However, the government would remove the safety net from all functions except for depositor protection. In other words, institutions who made bad decisions would be allowed to fail.

5. Rewrite laws and regulations specifically with securitized credit in mind. Most of the securitized credit transactions being done are based upon

existing laws and regulations. Many of the legal, accounting, and tax issues need to be clarified. Few of the structures have yet been tested in court. For example, the special purpose vehicles being employed have not yet been tested in bankruptcy proceedings.

For example, a possible legislative agenda might include: (1) expanding REMIC-type structures to all asset classes; (2) ensuring that special purpose vehicles are exempted from the Investment Company Act of 1940 (or at least clarify the issues); (3) removing Glass-Steagall restrictions on holding companies owning depository institutions underwriting, placing, and making markets in securities; (4) allowing depository institutions to sponsor (through holding company affiliates) open-ended mutual funds and to provide full service retail brokerage; (5) prohibiting all institutions underwriting a securitized credit issue from selling it to either originator-sponsored trusts or to mutual funds for which the originator makes discretionary investment decisions (to prevent self-dealing).

POTENTIALLY FAR BETTER SYSTEM

It seems to me that making these kinds of changes could enable us to wind up with a more effective, more efficient, sounder financial system. It would be a system that provides the benefits of competition without endangering the soundness of the financial system.

Specifically, it would provide for: (1) more profitable roles for existing, skilled commercial banks and thrifts; (2) profitable roles for skilled nonbanks; and (3) a safer financial system.

1. More profitable roles for existing, skilled commercial banks and thrifts. In the traditional system, there has been one role which included origination, structuring, servicing, and funding.

We have 14,000 commercial banks (plus 3,000 thrifts) who are trying to play that role today. Due to similarities in regulation, many of these institutions have pursued parallel strategies and have evolved similar capabilities and ways of operating. Now that the regulatory barriers, such as interstate banking laws, which had long limited competition between these institutions, are either falling, or are being bypassed, many institutions find themselves as head-to-head competitors with institutions with very similar capabilities. The more similar the institutional skills of those participants, the less value is being added. The public gains little from having thousands of institutions that offer the same undifferentiated product. Securitized credit changes the dynamics of this situation by creating a far greater variety of roles available to participants. For example, some participants can choose to compete in one function, credit origination, while others can choose to operate in credit enhancement, or servicing. Moreover, each

category of assets has the potential for these different functional roles: mortgages, credit cards, commercial loans, leasing, commercial mortgages, and so forth. Thus securitized credit has the potential to increase the variety of roles for financial institutions and to reduce head-to-head competition.

Despite the potential benefits of securitized credit, many bankers have been slow to adopt the new technology - many of them fear it. Small banks have been particularly fearful; most of them believe that it represents only a threat to them. And, at first glance, it would appear that credit securitization is only an important concern for large players. To date, except for government-guaranteed mortgage assets, almost no assets originated by community and local banks have been securitized. And we must confess that our initial bias was that credit securitization represented an opportunity only for the major money centers and regional banks.

However, upon reflection and further research, we have come to the exact opposite conclusion. Certainly, ample evidence exists that small mortgage brokers and mortgage banks have been able to prosper in a securitized world. We now believe that credit securitization may represent one of the main ways that community and local banks can maintain their customer franchise and survive the tidal wave of change now transforming our financial system. Many community and local banks are poor diversifiers of credit risk; securitized credit represents an opportunity for local banks to provide their customers with long-term, fixed-rate credit without taking undue interest rate risk. Moreover, some of the classes of securitized assets - e.g. floating-rate, mortgage-backed securities - may represent attractive investments for some local and community banks - particularly those banks in parts of the country suffering from regional recessions.

But community and local banks are too small to be effective players in securitized credit on their own. What they need is an infrastructure joining them together. As we see it, this infrastructure could evolve naturally from the national and regional correspondent banking networks that exist today.

Let me outline for you a brief snapshot of how we see the traditional system evolving into a new system based upon the securitized credit technology. Under the traditional system, banks had to match borrowers and depositors, and mismatches in demands were either reflected in the investment account or addressed by liability management. Historically, this system has produced large absolute profits for the industry; in 1986, the industry earned about $17.7 billion in after-tax profit. Much of this profit came from the direct investment of the industry's equity capital. For example, if the equity capital of the industry had been invested in long-term municipal bonds at prevailing 1986 rates it would have earned over $12.8 billion or over 80 percent of the industry's profits in that year which means that the entire value added from all other activities amounted to only $3.9 billion. Moreover,

returns continue to drop even if you exclude the one time LDC debt write-offs of this year. Overcapacity in the industry continues to lead to lowered returns on invested equity. The result is now low average stock prices, with many bank stocks now selling well below book value. Indeed, we see a continuing intensifying competitive spiral and deteriorating returns.

Securitized credit could, regulation permitting, fundamentally change this scenario. We envision a potential future system where commercial banks would serve borrowers in much the same way they do today, except that they would be offering a much wider range of borrowing choices, particularly a wider range of fixed-rate loans. The major change, however, would be that banks would no longer need to directly match off borrowers and depositors. Instead, good originators could originate assets largely free from balance sheet constraints. In other words, a small player with superior origination skills would be able to increase its market share rapidly without having to raise a proportionate amount of deposits or equity capital, although it would have to raise sufficient liabilities to warehouse assets until they were securitized and maintain enough loan loss provisions and equity to guarantee the first loss on assets they originated. Moreover, to the extent the bank had sufficient transaction deposits or below-market rate deposits, it would need to find offsetting assets - either securitized asset investments or other investments. This business system is not farfetched - mortgage banking already operates in this manner.

This system would create a large variety of new roles. Structuring, the process of actually converting the loans into cash flows and repackaging them for investors, would become a major business. We would envision that this role could be played not only by investment banks but by commercial banks that would work with their correspondents. Credit enhancement, the process of underwriting and diversifying credit risk and removing credit risk from investors, would become a major business for publicly rated foreign banks, insurance companies, and credit insurance subsidiaries of institutions that are today called bank holding companies.

Placing and trading the resulting securities would become an even bigger business than it is today as volumes continue to grow. It would probably continue to be dominated by investment banks although, regulation permitting, there would probably be a major role for some affiliates of bank holding companies as well. Finally, servicing the loans and the securities would also become an even bigger business, with the funds collection role continuing to be performed by the originating institution, and with the data processing and safekeeping roles being performed by a combination of commercial bank correspondents, service bureaus, and custodial banks.

We would expect the absolute profits earned by the entire industry from borrowers from this new system would decline over time because most of the direct earnings derived from simply lending out equity would be eliminated. However, we would expect that returns earned on equity from originating and servicing the loans that were converted into securities would

be high just as returns on equity from the mortgage banking business are already high. If so, stock prices would likely be high relative to book value. Moreover, we would expect that successful players could earn significantly higher absolute profits than they do today because they could potentially gain so much market share from other commercial banks, thrifts, and finance companies.

We also envision a future system where, today, commercial banks would continue to serve depositors and investors through branches and other distribution channels. This would be an expansion of the historic trust bank role performed by many banks today. Again, the direct link between balancing borrowers' needs with depositors would be broken. Some of those institutions would be able to raise far more money than they would be able to lend or invest on their own balance sheet. Moreover, we would see them, regulation permitting, not only raising deposits but also selling shares in money market mutual funds, bond funds, and equity funds, that would be managed and serviced by affiliates. Such an institution would invest the funds it raised in securities of all forms, although it would not be allowed to invest in securities that it had underwritten itself.

Exhibit 10 illustrates how the interaction between a depository institution and other holding company affiliates might take place.

This system would enable institutions that were successful at serving depositors and investors to earn high absolute profits and very high returns on equity. If so, these participants would probably have very high stock prices.

If this scenario were to unfold, a wide variety of highly attractive, very profitable roles would evolve. Some of today's depository institutions would likely become very skilled at serving the needs of borrowers; others at serving depositors and investors; others might continue to be strong at serving both borrowers and depositors; still others might carve out specialty roles for themselves, perhaps by concentrating on one or two elements of the business system such as credit enhancement or servicing.

Let me speculate for a moment on what particular kinds of roles are likely to emerge for three classes of banks: (1) community banks and thrifts; (2) regional banks; and (3) money center banks.

We would see today's community and local banks and thrifts playing a significant role in this future securitized credit system. Many of these institutions have strong customer franchises and would continue to provide value, as they do today, by assessing the borrowers' creditworthiness and tailoring the financing package to the borrowers' needs (although, to be sure, some of the terms offered to consumers and small businesses would probably become more standardized than they are today). These institutions would continue to service the loans and, upon default, would have to be

responsible for collecting the loan. In this role, as I have already mentioned, they would have to bear the first loss on any poor credit underwriting. Some of these institutions might become quite good at particular types of loans - e.g., small business revolving credit or commercial mortgages, and might become specialists outside their own communities in originating these types of loans. Since they would need less capital than under the existing system, their ability to grow share, if they were highly skilled in their specialty, would be greatly enhanced since the small size of their capital base would not be as serious a constraint on growth. Just as mortgage bankers can have billions of dollars of servicing volume on relatively small equity bases, some of these banks could have hundreds of millions of loans being serviced even though their own balance sheets remained relatively modestly sized. Another role that those institutions might play would be as investors in certain high-quality classes - i.e., AA or better - of securitized assets. Many depository institutions today, particularly in areas with regional recessions, have a shortage of high-quality assets in which to invest. Securitization of assets represents a way to increase the supply and variety of investment alternatives for these banks provided the assets were of very high credit grade - e.g., rated at AA or higher - and provided they invested no more than 10 percent of their capital in any particular issue (except federal government issues). If so, these institutions would essentially bear no real credit risk. Finally, many community and local banks may choose to forgo the loan origination role entirely and concentrate on serving depositors and investors. Freed from having to book all funds raised on their own balance sheet, some banks, regulation permitting, might be able to use their branches to originate a significant volume of funds from customers and serve as fund managers for money market funds, bond funds, or equity funds.

We would see regional banks having open to them these same opportunities, plus some other opportunities as well. First of all, we would see regionals helping community and local banks and thrifts structure their loans for securitization and helping pool together the $100 million or more of loans required to create a marketable security issue. It is equivalent to the mortgage conduit role played in the mortgage industry. This is an important role because we do not believe major investment banks are going to be willing to invest the time or energy required to help a $150 million community bank originate loans in a form which can enable them to be securitized. We think regional banks, in contrast, will be willing to invest the time. A related role regional banks can take is in helping to credit enhance loans originated by other, smaller institutions. We believe high-quality regional bank holding companies with strong credit underwriting skills would have an opportunity to work with other institutions to leverage those skills. For example, if a bank became very good at underwriting commercial mortgages, it could work with other players to help them properly underwrite commercial mortgages and could then charge a fee for providing the catastrophe insurance for credit enhancement. By the way, this is not much different from property and casualty insurance underwriters working with their customers to minimize losses and then insuring the remaining risks net of a deductible.

These strong regional credit enhancers could, of course, syndicate some of this catastrophe credit risk to others. Our belief is that only strong credit underwriters with demonstrated records of low-loan charge-offs will have the credibility with rating agencies and with other credit enhancers to perform this role. Another role for regional banks, legislation permitting, might be as placers and traders of securities (not just securitized credit but all kinds of securities) through securities affiliates. Another role could be to specialize in the servicing of particular kinds of loans being securitized, for example, accounts receivable loans or home equity loans. Finally, some regional banks may get to be strong enough with a specific class of securitized credit, for example, lease receivables or automobile loans, that they could play a national role.

The potential opportunities for money center banks are similar to those of regional banks except on a national basis. In addition, some money center banks such as Morgan, Citibank, Chase, and Bankers Trust may be able to compete successfully with First Boston, Salomon, Goldman Sachs, Merrill Lynch, Shearson Lehman, and GECC-Kidder Peabody for the national and global structuring/placing/trading role.

2. Profitable roles for nonbanks. These changes would result in a financial system where all participants would succeed based upon their ability to add value. These roles just described, of course, would not be limited to players who are today called commercial banks and thrifts. Rather, all players would be free to compete wherever they choose, including through ownership of a riskless depository institution. They would no longer have to compete against players with unfair regulatory advantages - e.g. deposit insurance. Indeed, the distinctions between bank and nonbank-holding companies would disappear.

I believe the proposal changes would result in a financial system that would better serve the public through vigorous competition. It would be a system that would enable skilled participants to prosper while permitting unskilled participants to fall by the wayside without the public having to bear the costs of failure.

As Adam Smith observed over 200 years ago, the winners in a competitive environment will be in the companies that provide the best products at the lowest prices to their customers. The amount of value added can be increased either by managing resources more effectively and efficiently to reduce cost. Fundamental profit strength will come from adding value to customers relative to competition.

Some parties fear that these kinds of changes will lead to poorer service to customers, particularly to borrowers such as small businessmen. I believe just the opposite, I believe once a more competitive system is in place all customers will wind up being better served.

In particular, some people fear that borrowers, particularly small borrowers, will lose access to credit. I do not believe this will be true because the essential borrower-lender relationship is not adversely affected by the new securitized credit system.

Most successful lenders are very customer focused, and rightly so. Indeed, one of the enduring values of most successful lenders is that they serve their borrowing customers so well. Actually, one of the most appealing attributes of the securitized credit business system is that it does not disrupt the normal customer relationship. Indeed, most customers are not even aware when, or if, their loans have been securitized. From the customer's viewpoint, the relationship is unchanged.

In fact, credit securitization has already actually helped banks offer types of credit that would be otherwise unavailable, on a prudent basis, from banks. Perhaps the best example so far is residential fixed-rate mortgages, which are transformed into mortgage-backed securities. As I mentioned earlier, many lenders cannot extend fixed-rate term money without taking undue interest rate risk. But credit securitization could enable lenders to offer a wide variety of other fixed-rate products to consumers, to small businesses, and to corporations without taking interest rate risk.

It is true that borrowers who are not creditworthy may lose access to credit since I believe credit securitization will put a stop to uneconomic credit extension - i.e. loans where expected losses exceed expected returns. But frankly, given the misery caused by poor lending practices, I believe this tightening of credit standards is a public good, not a public evil. Making bad loans benefits no one, particularly the borrower. Just ask Midwestern farmers or independent oil producers in the Southwest.

3. Provide for a safer financial system. The final, and most important, advantage of securitized credit is that it provides the potential to limit credit defaults without resorting to massive government intervention. As was pointed out earlier, the government safety net, while essential to protecting depositors, is the source of unsound lending practices in the country since it permits incompetent lenders to lend money to borrowers who lack the capacity to service or repay the debt. Yet it is this very same safety net which has enabled the nation to avoid the financial crashes that plagued our economy from the nation's inception through the 1930s. The problem is that without the safety net one major default can result in a "daisy chain" of defaults through the payment system. That is, an otherwise sound institution can fail today simply because some other institution defaulted, which then leads to that institution defaulting which causes other to fail and so forth. Presently, it would be impossible for the Federal Reserve to allow any major bank to fail because the interdependence through the payment system is such that it would bring the whole system down. It was this reality that

has led to the bailouts of such institutions as Continental Illinois or, more recently, First Houston.

But one of the major advantages of securitized credit is that the special purpose vehicles used to do the deals can be used to isolate these individual transactions from all other risks. Thus, even if a transaction is poorly underwritten, the resulting loss will not affect parties that did not participate in the transaction. In other words, while today, it is the federal government that ultimately must absorb the risk of a disastrous credit decision by a depository institution, in the future the risk of a poorly underwritten securitized credit transaction can be borne by investors and credit enhancers, so there is no need for federal bailout. Of course, this is only true to the extent that neither the end investors nor the credit enhancers in the transaction are federally insured depository institutions.

There may remain the need for a lender-of-last-resort function to prevent market panics, but this need already exists for major nondepository as well as depository institutions. If one of the major securities firms were threatened with failure, the Federal Reserve would surely step in to provide liquidity. But a lender-of-last-resort is not a guarantor; in providing the lender-of-last-resort function, the Federal Reserve should be able to avoid credit losses if it insists on adequate collateral before it extends emergency credit.

As a final point, let me describe how the improved system would improve the soundness of our financial system by reflecting on what would have happened if the Penn Square/Continental Illinois credit tragedy had taken place with the changes in the financial system proposed in this testimony.

First of all, it seems unlikely that the transactions would have ever been securitized. I doubt that any credit enhancer, who did any homework at all, would have been willing to guarantee the kinds of loans that were originated by Penn Square. I further doubt that the rating agencies would have been willing to rate the transactions so that they could have been sold to investors.

Penn Square, with only $30 million in capital, would not have been able to take a first recourse loss on much of the loans it originated even if it had only been a nonbank loan originator (and therefore needed no capital for depository institution purposes). Even assuming that these risky loans only required a 10 percent first-loss guarantee to be securitized, Penn Square would only have been able to originate $300 million of loans if it was required to keep a dollar of capital for each dollar of first-loss exposure. If a Continental Illinois credit insurance subsidiary had credit enhanced, through a wrap around guarantee, a 10 percent first loss on these assets it would have only been exposed to a maximum $30 million loss (assuming the Penn Square quarantee was completely valueless) rather than the multibillion

loss it wound up facing. Moreover, the sheer process of disclosure would have probably prevented the volume of loans to grow even to that level. Even some of the top management of Continental were apparently unaware of what was going on with Penn Square; if public disclosure had been made concurrently with the granting of the credit, as happens when loans are securitized, surely the unsound lending practices would have been ended sooner.

But assuming for the moment that somehow $2 billion had been securitized and that a Continental Illinois subsidiary had guaranteed 10 percent of that amount and lost the entire $200 million. Under the proposed system, the Continental Illinois bank would not have been impacted and there would have no need for FDIC or the Federal Reserve to intervene. The credit insurance subsidiary may have been forced into bankruptcy, but the depositors of Continental Illinois would not have been affected. Any losses beyond the guarantee of this credit insurance subsidiary would have been borne by the end investors, probably at least 100 of them who, even assuming a 30 percent additional credit default (i.e., a 40 percent total write-off) would have, at the end of the day, suffered no more than a $6 million average loss (i.e., 30 percent of $2 billion divided by 100). In contrast, in the actual Penn Square/Continental Illinois transaction, the risk was concentrated in five banks, and all of them were significantly damaged.

Frankly, I believe that if legislators, regulators, and participants embrace the securitized technology, and proactively take action to make it work effectively, we will wind up with a far better, overall financial system. Indeed, I believe it can provide a key to unlock the current debate, which is caught up in issues of institutional self-interest versus the public good. And at the center of the debate are concerns about the soundness of the banking system, about the potential costs to taxpayers of the existing deposit insurance system, and about the adsurdity of trying to keep securities and banking separate when the very process of credit securitization is making that separation impossible.

Do not get me wrong - I do not see securitized credit as a panacea for all of the ills of the nation's financial institutions. It will not remove existing problem loans from the balance sheets of the nation's commercial banks and thrifts. Nor will it help out poorly managed commercial banks or thrifts that lack the skills to compete. Many of the advantages of securitized credit described up until now are only potential advantages. To realize the potential from this promising new technology will require action by regulators and legislators.

October 14, 1987

Exhibit 1

CREDIT SECURITIZATION IS CHANGING THE TRADITIONAL COMMERCIAL BANKING BUSINESS SYSTEM

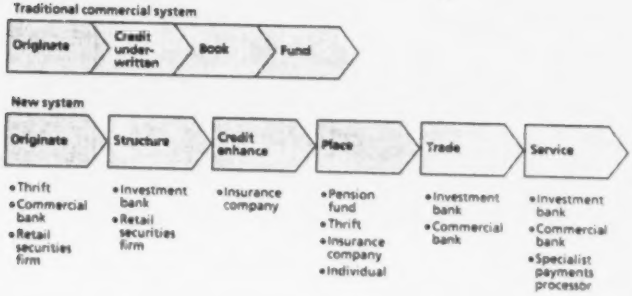
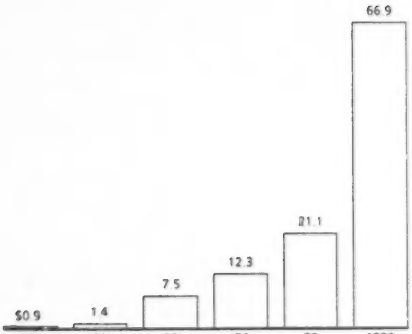


Exhibit 2

PRIVATE MORTGAGE-RELATED ISSUES
TOTAL ANNUAL ISSUANCE VOLUME

$ Billions



	1981	82	83	84	85	1986
Number of issues	17	40	122	267	538	1,081

Exhibit 3

AMOUNT OF CREDIT SECURITIZED
1986 THIRD QUARTER

$ Billions outstanding

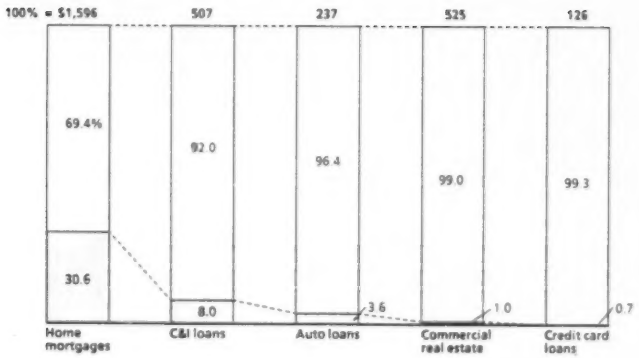


Exhibit 4

COMMERCIAL BANKS NET INTEREST MARGIN BY NET CHARGE-OFF RATE DECILES

MEDIAN VALUES FOR 1986

Percent

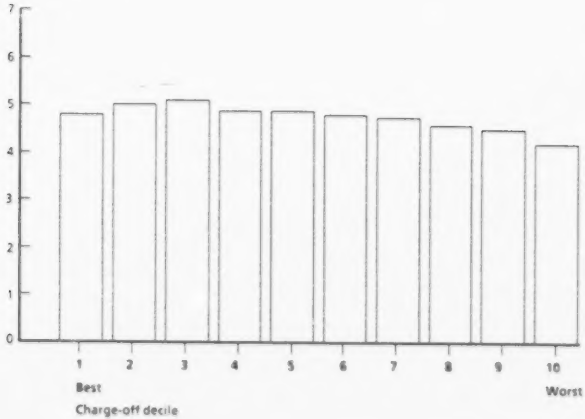


Exhibit 5

YIELDS ON LONG-TERM BONDS BY QUALITY OF ISSUE JUNE 30, 1986

Percent

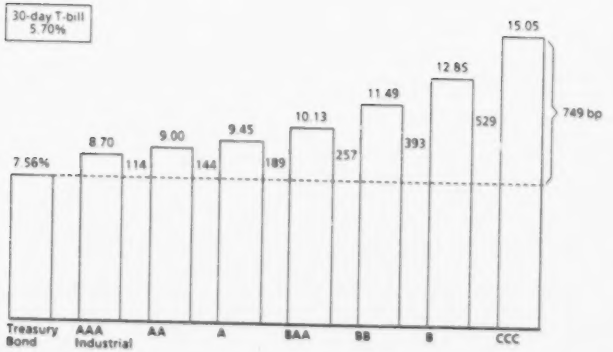
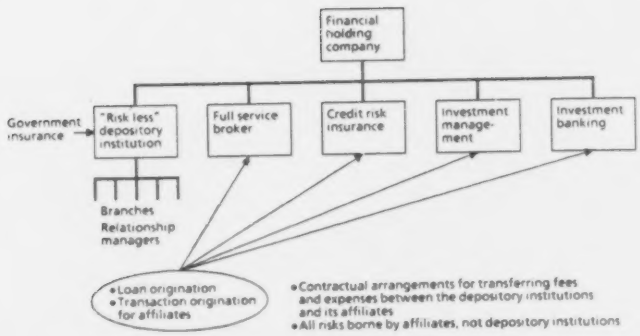


Exhibit 10



The CHAIRMAN. Thank you very much, Mr. Bryan.
Mr. Fisher.

STATEMENT OF JOHN F. FISHER, BANC ONE CORP., COLUMBUS, OH

Mr. FISHER. Senator Proxmire, members of the committee, thank you very much for this opportunity to present our testimony in this important study you have underway.

By way of background, my organization, Banc One Corp., is the owner and operator of banks in four States—Ohio, Indiana, Michigan, and Kentucky. And as you've indicated, Senator Proxmire, soon, with the blessings of many, including the regulatory process, we'll also be affiliated with the Marine Corp. in Wisconsin.

This will bring our total assets to about $22 billion, placing us in the upper 25 top bracket in the country.

My testimony, which I would like to briefly summarize, focuses on four broad areas of technology.

FOUR AREAS OF TECHNOLOGY

The first deals with the development of electronic delivery systems which have been underway in our country for at least two decades. I focus particularly on the development of the automatic teller machine and the promise of the point-of-sale systems which are now getting underway.

Today in America, we have about 200 million Americans with cards, debit cards, able to be used in automatic teller machines. They'll soon be able to do simple transactions with electronic point-of-sales systems given the recent agreement on the part of Visa and Master Card and at the urging of the American Bank Association to introduce a new trademark, which will be known as Entre.

It will be coming to the market yet this year and we believe before this decade is over, the electronic delivery systems which have been spawned by the ATM will now allow customers to have

access, to gain cash and to pay for things with debit transactions as well as credit transactions across our country.

We have two broad regulations that control those two functions—regulation Z, the basic credit regulation, and regulation E. And while, over the last 10 years, they have been introduced in our society and basically accepted very well, there are disparities between these two, particularly in the area of liability.

I believe as the marketplace over the next several years begins to look at the credit and debit card as identical—one accessing debit functions, deposit accounts, the other accessing line of credit—they will, for all practical purposes, be identical.

They'll look alike. They'll operate over the same national telecommunications networks and they'll be treated basically the same. However, the disparity between the liabilities of regulation Z and regulation E, I believe, will create a marketplace confusion.

And I urge your committee, Senator Proxmire, to consider modification of that regulation.

My comments also focus on the development in our branch delivery system in American banking, somewhat being changed because of the use of these new electronic delivery systems.

Today, American banking has about 44,000 stores, if you will, branch stores, many of which are now underused because of mainly competitors which have been eating away at the edge of our cookie.

One of the major studies underway today in our industry is the total revitalization and rehabilitation of these branch delivery systems.

My own organization, for instance, has had experimental branches underway for the last 3 years in which we have changed the transaction orientation from the old way of the sixties and seventies, when the branches, for the most part, were put in place, and we've also added a significant new product line.

We've been trying to find other things that we can sell in a marketplace. Because of regulation, I'm unable, obviously, to sell directly, insurance, real estate, so I've leased space to those who can sell that into my branch, my neighborhood branch.

I'm also able to provide in Ohio through our State bank a travel service, so I have a full-fledged travel broker in my branch. I'm able now to provide discount investment and broker services. I've provided trust services because I've had that power before.

So my neighborhood branch now has a new product line that has not been available. And I believe the studies underway that we see in the industry would suggest about 20 percent of the Nation's branches over the coming years will be revitalized and rehabilitated to expand the types and products that will be delivered through a typical neighborhood branch.

The regulation in the area of preclusions of Glass-Steagall and others present to us, we think we'll need further modification so that we can truly as an industry begin to introduce the financial supermarket that is anticipated and needed in the marketplace.

A third focus of my comments deals with a coinvention with Merrill Lynch of the CMA or cash management account back in 1977. There are today about 2 million Americans, mostly up-scale, that use that type product. Over a 100 million checks today are

written against CMA-like products in 30 million card transactions against those kinds of products.

The banking industry being unable to provide the mutual fund function that's a part of that important product, therefore, suffer disadvantage. And I've suggested in my testimony, Senators, that that, too, should be equalized as a part of your study with Glass-Steagall.

SECURITIZATION OF LOANS

Finally, I also address the securitization of loans by bank initiated, the cards securitization concept with Salomon Brothers about a year ago. And we believe that the successes that our industry and the needs that we have in our industry, as well as the marketplace, can best be served if our industry is able to go directly, without a third party, to the market with those types of securities.

To use the balance of my time, I want to tell you a story. And I'd like to tell the story because I think it identifies the concern we have about the Glass-Steagall Act.

Flying over here yesterday, I came early in order to deliver my 100 copies promised. I flew over the little town where I grew up in eastern Ohio. It was a delightful day in eastern Ohio, as it was here. And I was able to look off the right wing in my TWA flight, which had climbed up to about 30,000 feet, and see this little city still screwed down into the strip mines of eastern Ohio.

And as I looked at it, the Sun was such that a reflection glinted off—the water tower is painted aluminum, located at the north end of town—and I could actually see the spot from 30,000 feet where 50 years ago, as a youngster, I had played.

And like some of you in this room, I'd played rubber guns and Ollie-Ollie-Out-and-Free and Kick-the-Can and some of the other games you might remember. And I always wanted to be at the water tower in the evening so that I could see the U.S. mail plane as it hopscotched across our country flying from Pittsburgh to Columbus, to watch the Pitcarin airmailer flying like a moth, being attracted by the beacons that our country had located every 10 miles across America, as the technology for navigation in those days.

And I was romanticized by aviation. Spent yesterday over at the Space Museum. I thought many times what it must be like as a youth, what it would be like if I ever got to fly. Would I be frightened? What would I do if the propeller stopped? How big would things look from way up there, way down there?

And I can recall I just thought maybe some day that this great event would happen. As I looked at that yesterday and this wave of nostalgia kind of washed over me, I wondered if there was a youth down there looking up at my great silver bird with a vapor plume extending out behind it.

I'm there in my shirtsleeves with 120 other people. I've got a Bloody Mary with ice in the glass. I'm going to have a warm lunch. Seated right across from me is a man reading the Wall Street Journal which had been transmitted and printed by a satellite that morning in Bowling Green, OH.

In front of him was a man with a lap PC, obviously writing himself a memo. What really struck me was all of these new technologies—including aviation and communications and computerization and even the politics that are a part of this congressional hearing—have changed dramatically—except banking.

In the 50 years that have snapped through my mind, we're still albatrossed, in my view, by the Glass-Steagall Act, written into law in 1933. And I wondered what banking would be like, as I landed here at National Airport, had we had the opportunity to compete, to deliver the kinds of sensitive and worthwhile products our marketplace needs, as has the rest of industry.

I wish you success in this important effort.

Thank you.

[The complete prepared statement of John F. Fisher follows:]

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The CHAIRMAN. Well, thank you, Mr. Fisher, for a very beautiful story, as well as for excellent testimony. I appreciate that.

Professor Phillips.

Hard act to follow, Professor Phillips. [Laughter.]

STATEMENT OF ALMARIN PHILLIPS, PROFESSOR, PUBLIC POLICY, ECONOMICS, AND LAW, UNIVERSITY OF PENNSYLVANIA PHILADELPHIA

Professor PHILLIPS. Thank you, Senator, members of the committee. I've had the problem of following John Fisher before on a number of occasions. And I agree. It's a hard act to follow.

I do appreciate the opportunity to appear here today. My prepared remarks for the most part will suffice for my initial comments. I do want to emphasize a few points and add to those.

The attention that's being given by the committee to the role of technology and to new financial services is certainly appropriate. At this stage of the game new legislation relaxing the present inhibitions on the deposit financial institutions to participate generally in the technological progress that Mr. Fisher was referring to seems to me to be critical.

REGULATORY RESPONSES

In my prepared remarks, I emphasize the regulatory responses that have occurred in the history of the deposit financial institution. And I call them "slapdown responses" to efforts on the part of the institutions to adapt to the new technology.

These slapdowns have occurred with respect to bank holding companies.

They have occurred with respect to the introduction of certificates of deposit in the early years.

They occurred with respect to possible innovative uses of subordinated debt instruments.

They occurred in large measure with respect to possible innovative trust services which the institutions might offer.

They occurred with respect to the use of bankers' acceptances to accommodate credit needs, particularly of the credit needs of smaller customers.

They have occurred with respect to regulation Q, the relaxation of regulation Q and moving that regulation in the wrong direction at various points in time.

They have certainly occurred with respect to underwriting—the underwriting of commercial paper, underwriting of revenue bonds.

And in some respect, they are occurring now with respect to nonbank banks. Instead of having a set of laws and regulations that, accommodate new technology, the regulations and laws, have in fact, been an obstacle so far as the banks have been concerned.

And the same is true, I think, of the other deposit institutions.

Now, these hearings tend to focus on those questions being raised about securitization. And while securitization is in same respects an interesting new buzzword describing an interesting new phenomenon, I think that the import of Mr. Bryan's remarks is that securitization is one more new product in a chain of new products that new technologies have made possible. It's not going to be the

end of the revolution in banking services; it may be a very important one, as Mr. Bryan says, and it also seems to be one that is causing many people to have great concern.

What's wrong with securitization?

If a commercial bank can make commercial loans and hold the paper to maturity, if it can alternatively endorse and sell the paper as commercial paper, or the bank can borrow using the paper as collateral, why should the bank not be able to contribute to improvements in related markets through full participation in the securitization process?

May it not solicit issuers of paper?

May it not take title to the paper, even though its intent is immediately to resell?

May it not solicit potential purchasers of the paper?

May it not, as in the securitization process, use the paper as a backing for a new type of security that may have a broader and, in many respects, a more efficient market?

The answer to these questions seems to be in the negative, although there's no obvious reason to me why from a policy point of view this should be the case.

I don't mean to say by this, and I don't think Mr. Bryan does, that there are no problems associated with securitization. The public may be misled. There may be fraud in the absence of appropriate regulatory surveillance. The practice may increase the ability of banks to—does increase the ability of banks to—turn their assets more frequently and, in effect, to make more loans from the same capital and deposit base.

This has implications for monetary policy—not unique implications, however, because many of the other innovations, including the CMA innovation that John Fisher referred to, have similar effects.

The deposit insuring agency and other regulators certainly may have legitimate interests in the nature of liabilities, contingent liabilities and off-balance sheet liabilities, if any, that may remain with the institution whose assets are securitized.

Note, however, that these genuine concerns—and these tend to be less highlighted than the Glass-Steagall concerns—will not be made the less relevant by prohibiting banks and other deposit financial institutions from directly participating in the securitization process.

If the underwriting functions are handled by an investment banker, all of the problems I alluded to remain. Further, the concerns will not be made less relevant by outlawing securitization or any other attractive financial innovation. Prohibitions may punish particular financial institutions, but in the technology environment in which we now operate, the same sort of thing will be done by some other institution in some other market. The new product will come forth.

It's been my view, Mr. Chairman and members of the committee, that regulators and legislators have a positive role to play in the regulation and deregulation of the marketplace. It's not enough for laws and regulations to arbitrate differences among vested interests.

Exhibit 6

COMMERCIAL BANKS NET INTEREST MARGIN
CHARGE-OFFS BY NET CHARGE-OFF RATE DECILES

MEDIAN VALUES FOR 1986

Percent

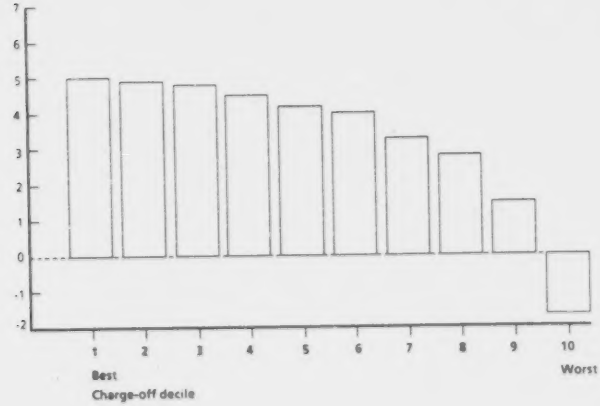


Exhibit 7

ILLUSTRATIVE

	Unbundled risk portfolio (per $100)							
	Expected loss	First loss	Required capital	"Catastrophe" insurance	Required capital	Total capital	Total protection	Today's capital
Customer credit card receivables	3.0	5	5	25	1.3	6.3	30	7.3
Auto finance receivables	0.4	3	3	10	0.5	3.5	13	7.3
Accounts receivable portfolio	0.2	2	2	10	0.5	2.5	12	7.3
Community bank (New England) loan portfolio	0.1	2	2	10	0.5	2.5	12	7.3

Exhibit 8

CREDIT RISK DIVERSIFICATION

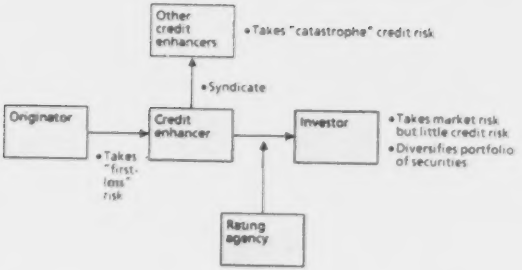
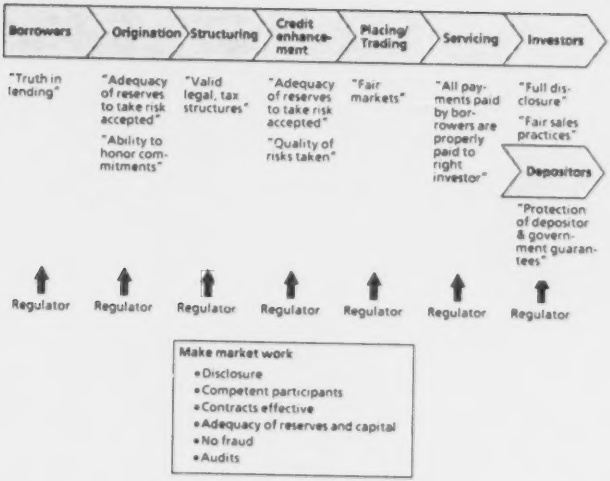


Exhibit 9

MOVE TO FUNCTIONAL RATHER THAN INDUSTRY REGULATION



TESTIMONY: New Technology for the Structure and Regulation of Banking

: John F. Fisher, BANC ONE CORPORATION

Senator Proxmire and Committee members, thank you for this opportunity to testify concerning new technology and the structure of banking. To acquaint you with our organization, I am Senior Vice President of BANC ONE CORPORATION based in Columbus, Ohio which, as a bank holding company, owns and operates banks in Ohio, Indiana, Kentucky, and Michigan with assets of about 18 billion dollars. A pending affiliation, when approved, with the Marine Corporation in the Senator's own state of Wisconsin will bring the asset size at about 22 billion and place BANC ONE in the top 25 largest bank category.

My testimony deals specifically with technological developments within the banking industry affecting the invention and delivery of banking service. My comments also more generally touch on the preclusions imposed by the Glass-Steugall Act and the need for their timely modification.

The most significant technological development affecting banking and its relationship with the consumer deals with the electronic delivery of service. The automatic teller machine (ATM) and point-of-sale terminals (POS) are the principal technologies involved in the dramatic change taking place in how, when and where banking services are made available. Presently Regulations E and Z address these vital delivery systems. My present view is that these two regulations are currently adequate although they will soon need further modification.

The ATM has become banking's primary engine of technological change with over 60 thousand machines now in operation. After a slow beginning in the early 70's, there are now over 200 million ATM cards in the hands of American consumers, and 45% of all households are using the cards to initiate 250 million transactions a month. Estimates indicate that about 20% of these are interchange transactions in which a customer of one bank uses a machine owned by another bank.

Regulation E and the initial CBCT ruling of the Comptroller of Currency have been sufficiently modified and accepted over the last 10 years to encourage this widespread and significant useage of the ATM. It is no longer a phenomenon of interest to the young and agile but it is now a vital and required technology of benefit to all America.

The point-of-sale terminal is now ready to take its place beside the ATM as a national financial system for the convenient and low cost delivery of banking services. The recent release of guidelines and standards at the direction of the American Bankers Association, with the full support of both VISA and Mastercard organizations, plus the impending introduction of Entree as the national trademark for POS, all signal the long awaited launch of this much promised system. The next several years should see the 30 thousand terminals now in place expanding dramatically enabling the ATM card to perform as a full-function-all-purpose debit card and as a companion to the credit card.

The consumer demands for wider utility for the debit card will prompt further ATM and POS changes yet this decade. We are fast approaching the time when America will be able to get cash and pay for things anywhere in the country from a deposit account as they can do today from a credit account. This means all debit cards will be useable in all machines as opposed to the selected use of today.

Regulators and legislators should anticipate these developments which will create regulation modification in two areas. First, the marketplace will perceive no difference between credit and debit cards other than the fact that they access either a deposit or line of credit account. They will be virtually identical in appearance and will perform equally in any terminal or ATM. And yet important disparity exists between Regulations E and Z in the areas of liabilities associated with using credit and debit cards. We will need a more uniform solution for these regulations. Second, customer identification systems for the ATM use a PIN (Personal Identification Number) of usually four customer chosen letters or numbers. This PIN is now also becoming the recommended procedure for Point-of-sale transactions. The national and widespread usage of PINs in hundreds of thousands of terminals may stimulate new regulations dealing with electronic customer identification. While not an immediate concern, it is an assured requirement of the future and the PIN may become insufficient.

I would like to now focus my comments on a second technological implication, which is being created in a major way by the success of the electronic delivery systems I have just discussed. This technological development deals with revitalization and rehabilitization of the banking industry's branching system. Some early developments suggest that potentially 20% of the nations 44,000 commercial bank offices will be converted into financial service centers providing the wider variety of services already available through the recent bank deregulation and the increasing range of services anticipated through the final relaxation of Glass-Steagall.

Clearly, electronic delivery systems centered around the ATM and the automated clearing house (ACH) are now being combined with general branch automation to speed and simplify the handling of routine branch transactions. But potentially even more significant is this rehabilitation of facilities in order to introduce competitive new services. My own organization has been experimenting for three years in modifying branches to add broker and investment services, trust, travel, and second mortgage service, all available through subsidiaries of the bank, plus, through a leased space arrangement a full line insurance broker and real estate sales office, are all housed in selected neighborhood branch offices. When combined with the existing product line at most branch offices, the addition of these new services permits us to introduce the financial supermarket thus increasing the availability and convenience to our customers while aiding us in meeting the onrushing competitive position of national retailors and others operating non-bank banks.

My comments in this testimony are aimed at identifying this prospective industry-wide development and to suggest that the unbridled and deregulated opportunity to provide this expanded service offering can produce significant consumer benefits. These, we believe, will be most noticeable

when banking is enabled to sell insurance products as a part of the complete financial package needed in the marketplace. Until regulation is relaxed we can either accept our present uncompetitive position or practice the subterfuge of pretending we truly meet the financial needs of our customers and rely on someone else to do what we should be doing, such as lease selling space in our branches to competitors.

The next focus area for technological implications involves the invention and introduction 10 years ago of the central asset account or as it is commonly known, the CMA account.

The cash management account, co-invented by Merrill Lynch and BANK ONE over 10 years ago, brought a major new service to the sophisticated user of financial service that combined the transaction account, as provided in the form of a check and plastic card from BANK ONE, and an investment account as provided by Merrill Lynch. The product gained widespread acceptance as a superior method of combining financial services. Today over 2 million Americans use this broker service generating over a 100 million checks and 30 million plastic card transactions a year. This significant service is primarily provided to upscale brokerage company customers by the banking industry, including my own bank, and the painful issue is that we bankers can not provide an equal service because of the preclusions of Glass-Steagall. We provide the ammunition to our competitors but are unable to field our weapons.

Clearly, banks can provide central asset accounts by linking to a third party brokerage firm willing to supply the investment feature of the account. My bank does this today. But it means that the most important feature of the account, the investment feature, must be supplied to my customer by a third party organization and one not within my control.

If American banking service is to compete with American brokerage service in this vital area and is to extend benefits of this important product to our broad customer base, and not just upscale investors, then banking must win the right to provide mutual fund capability. The modification of Glass-Steagall, in some thoughtful and equitable manner as opposed to the arbitrary solution of today, is clearly required.

My final focus on the regulation implications of technology deals with additional requirements for the modification of Glass-Steagall; specifically the issues of securitization.

I think the issue was best stated in an American Banker article on September 25, in which the Chairman of this committee was quoted as saying, "I think you have to recognize what is happening to the technology of lending. Now we have the securitization of the lending process in which mortgages are packaged. Those are the two backbones of the business. If banks aren't allowed to do that" - I am still quoting Senator Proxmire - "then they are going to lose more and more and more business." Unquote.

I am certain, as members of this committee know, securitization has not been expanded to include all forms of lending assets, including credit card loans

as initially conceived and arranged by my bank, through a third party brokerage firm, well over a year ago. It is now our firm belief that if banks have the ability and expertise to arrange and service these loans then they should have the ability to underwrite the sale of securities backed by these loans. Our bank has previously arranged the private placement and securitization of credit card loans. We see no difference in now providing the same package of loans directly to the marketplace.

Were securitization to become more direct and commonplace, banks would improve their ability to grant additional credit, by being able to off-load the asset as a security. This would improve capital ratios and diversify risk. Additionally, banks with strong servicing capability would be able to improve earnings by servicing loans originated by other credit grantors. The technology of today permits the granting and monitoring of credit services on a national basis which in turn increases the availability of credit and resulting national competitiveness. Since, as yet, deposits are still gathered for the most part, on a local or regional basis, a method must be found to keep the balance sheet in balance. The direct placement of securitized assets is a solution whose time has come.

My testimony has focused on four implications of technology:

- The national development of electronic distribution systems that will provide a wide array of financial services through ATM and POS systems, requiring some future modification to Reg. Z and E.

- The prospective rehabilitation of an important number of banking's branching system encouraging additional product offerings and urging the relaxation of regulation to enable that expansion.

- The required introduction of mutual funds on the part of banking in order to equalize the central asset products offered by brokerage firms with the assistance of the banking industry.

- And finally, the suggested modification of Glass-Steagall enabling banks to directly underwrite securitized loans.

The time is here to modernize the American banking systems by modifying Glass-Steagall and to break this 50 year old chain that has foreclosed the banking industry from joining the competitive and modern-day business world in providing beneficial service to the marketplace.

My banking organization, the BANC ONE CORPORATION, and I thank you for this opportunity to present this testimony.

In truth, the commercial bankers or, in my view, a majority of them, are as responsible as the investment bankers, or most of them, for the continued impasse in public policy in this area. It is time for Congress and the regulators to act, even with the recognition that many of their constituents in these communities would be less than pleased.

This committee, Mr. Chairman, and Senator Garn, too, has really been a very important vehicle in leading the way. And I urge it to do so again.

Senator Proxmire, more personally, I recall very well—perhaps you and I are the only ones here old enough to recall—the work that you and Senator McIntyre and at times Senator Tower of Texas did in the early 1970's with respect to what was then called the Financial Institutions Act of 1974.

And, indeed, you succeeded by hard work to get that act through the Senate, although it failed on the House side. It's perfectly clear to me that had that bill become law—we're talking about as much as 13 or 14 years ago—that many of the problems of financial markets that have ensued in the meantime either would not have occurred or would have occurred in a framework that substantially reduced their severity. The crises that led the Congress to act on an emergency basis a number of times in recent years very likely would not have occurred.

I urge the Congress to proceed ahead under your leadership as it did then.

I have a short wish list. It is just a wish list at this point. First, I think that the definition of "bank" as provided in CEBA, the Competitive Equality Banking Act, will prove to be a helpful one. Then there needs to be some provision of law—either a repeal of Glass-Steagall or an overriding of some of its provisions—that would permit nonbank subsidiaries and the subsidiaries of banks themselves to underwrite and to sell and distribute, as principal or as agent, such securities as may be determined by the regulator to be a necessary incident or an ancillary competitive service of bank holding companies and banks.

The initial presumption declared in the legislation would be that commercial paper, other traditional bank assets that might be securitized, and revenue bonds would fall into this category.

In addition, since this is a wish list, I would remove the restrictions on interstate banking imposed by the McFadden Act and the Douglas Amendment.

The payment of interest on corporate demand deposits should be permitted. Continuing regulations dealing with the definition and terms of various types of deposits should be relaxed. The latter would permit a badly needed simplification in reserve requirements.

To more or less complete the list of issues to which this committee has repeatedly given its attention but with respect to which policy stalemates remain, I note that the payment of interest on balances held at the Federal Reserve is still highly desirable.

Thank you very much.

[The complete prepared statement of Almarin Phillips follows:]

The CHAIRMAN. Thank you, Professor Phillips.
Mr. Taylor.

STATEMENT OF DAVID TAYLOR, GROUP EXECUTIVE, BANK ADMINISTRATION INSTITUTE, ROLLING MEADOWS, IL

Mr. TAYLOR. Thank you, Mr. Chairman. It's a pleasure to be here. And I was commenting, or I was reflecting on John Fisher's story, which I enjoyed very much, and thinking that from representing a bank that's been as progressive as Banc One has been and as innovative, it occurred to me that that's exactly the point that's at issue here today. And that is that the banking industry this year is expected to spend somewhere in the area of $10 billion on technology. And I think the issue is how that investment is provided, the benefits of that investment are provided to communities across the country, not only in New York City and Chicago and San Francisco, but in Bowling Green, OH and Downingtown, PA and lots of other places.

I'll just make a few brief remarks to supplement the statement that I submitted to the committee along the lines that the Glass-Steagall Act was passed in 1933 to promote the soundness and competitive equality of the Nation's financial infrastructure.

The act's separation of commercial banking and investment banking was seen as a way of avoiding concentration and limiting risk in financial markets.

PRIMARY CONCERNS

Some of the primary concerns included: One, the safety of depositor funds. Investment banking activity, such as underwriting, trading and holding securities in portfolios were viewed as inherently risky for commercial banks and, therefore, a threat to their depositors' funds.

Point two, is the consolidation within the industry. Congress was concerned that a few large banks, primarily in New York, could use their tremendous resources funded by deposits to squeeze out smaller investment houses or to exert undue influence on commerce.

Point three, there was a potential conflict of interest and the separation of commercial banking and investment banking were seen as a way to eliminate these potential conflicts of interest.

These could include the use of deposits or trust funds to underwrite securities, or the issuance of securities to pay out troubled credits.

Market manipulation was a concern. The framers of the act hoped to reduce the potential for market manipulation either due to the use of deposited funds or due to privileged credit information.

Developments in telecommunications and information management have reduced these dangers, primarily by creating more efficient financial markets. Market efficiency has been improved in the following ways.

Information that affects the markets is widely and instantly available. Modern data base management and information process-

ing technology provide a means for computers to handle the tremendous amount of information that affects prices of securities.

Not only can the data be efficiently managed, it is also transmitted to market participants instantly via modern telecommunications channels. Indeed, the term "program trading" has become synonymous with high levels of activity in the market.

All market participants have access to an enormous amount of information on which to base decision, and so commercial banks do not have the competitive advantage they might have had in 1933.

Telecommunications has made the market broader. High speed lines directly connect investors worldwide with brokers on all major exchanges. Services such as Quotron, Telerate, and Reuters allow instantaneous feedback on transactions and prices.

This immediate transaction capability increases market efficiency by allowing the markets to adjust immediately to any stimulus, and the expanded number of active participants reduces the danger of market manipulation.

The broadening of the market via telecommunications has also created global financial markets. This reduces the danger of consolidation and concentration in the market by expanding the roster of competitors from the closed fraternity of Wall Street to the international community.

Computerized models for analyzing the risk and availability of markets greatly reduce the risk of underwriting trading and portfolio management. These activities still entail risk. However, computerized information management systems permit the analysis of greater quantities of data and facilitate sophisticated hedging strategies and there allow market players to control risk.

The very liquidity of securities in computerized markets makes them perhaps less risky than commercial and industrial loans.

Technology is already serving to blur the barriers between commercial banking and investment banking. As securities trading becomes more highly automated and more securities are traded on the basis of electronic book entries, investment securities take on more of the fungible characteristics of transaction accounts.

In summary, advances in telecommunications and information management technology in the last 20 years have greatly increased the breadth and efficiency of financial markets.

The concerns of public policy that led to Glass-Steagall were the result of abuses made possible by closed, inefficient markets. The improved efficiency of money and capital markets removes the potential for manipulation and excess risk evident in the 1920's and 1930's. As such, technology has reduced the need or even the advisability of separation of commercial and investment banking.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Mr. Taylor.

[The complete prepared statement of David Taylor follows:]

Statement of

DR. ALMARIN PHILLIPS

Hower Professor of Public Policy, Economics and Law

to the

COMMITTEE ON BANKING, HOUSING AND URBAN AFFAIRS

UNITED STATES SENATE

October 14, 1987

Mr. Chairman, Members of the Committee, I appreciate your invitation to appear here today. This Committee has made major contributions to the delineation and formulation of policies governing the nation's financial institutions. The attention now being given to the role of technology is particularly appropriate. There is a certain inevitability about the effects of technology on financial markets and the institutions that serve them that requires regulatory and legislative accommodation. This is not to say that regulations are no longer needed; rather, the point is that new technologies make it essential to relax some old restrictions in order to promote the efficient development of financial markets. The old regulations seem now to cause more harm than good.

One need look backwards only a few years to glean the significance of technological change in financial markets.[1] The magnitude--if not the substance--of change can be seen in the near-astronomical increase in the turnover rate of bank demand deposits. Thus, in 1955, large New York City banks were experiencing a demand deposit turnover rate of about 50 per year. That is, total debits to (payments from) these deposits during the year amounted to 50 times the average amounts of these deposits held by the banks. Stated another way, and based on a 360 day year, on average a dollar stayed on deposit for 7.2 days.[2]

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1. Technological change is used here in the conventional economic sense. It refers to the introduction of new processes for the production of existing goods and services and the introduction of new goods and services.

2. For those with historical curiosity, the demand deposit turnover rate in New York was also about 50 per year in 1920. It rose to nearly 100 per year by 1929 and then fell precipitously in the early depression years.

Things changed. By 1965, the demand deposit turnover rate of the New York banks was about 101 per year, twice that of 1955. By 1975, the rate had grown to over 350 per year and just two years ago, in 1985, the rate was 2,191 per year. In April of this year, the figure was 2,755 per year. Instead of a dollar staying on deposit for 7.2 days, it was staying on deposit for only about 3 hours of a 24 hour day. The New York banks from which the data were collected were turning over their $40 billion in demand deposits almost eight times per day.

It is the events behind these figures that give substance to the technology story. Underlying the whole scenario, it should be noted, are developments in computer and data processing technologies. These were used in a variety of ways with a variety of consequences. Briefly, by the mid-1950's, businesses began focussing on new cash management practices. Higher interest rates and lower transactions costs made holdings of short term governments an attractive alternative to bank deposits. As these obligations were increasingly bought and sold, the effect was to increase deposit turnover rates. In the same period, individuals were attracted by the higher deposit rates paid by the thrift institutions and, in smaller number but subtantial volumes, by the returns to be realized through investments in mutual funds or direct investments in stock or bond market instruments. These transactions also caused an increase in bank payments, but not in the demand for bank balances. The increased pace of bank mergers, branching and holding company formations reflects at least in part non-price competitive responses by banks to these developments.

By the 1960's, a growing number of banks recognized that existing regulations were denying them opportunities to compete with new products and services. Regulation Q and the prohibition of interest payments on demand deposits made price competition at first difficult and later almost wholly ineffective. Moreover, at just the times when the banks and their customers most urgently wanted additional credit, the Federal Reserve acted to make that credit unavailable. Paradoxically, the policy directions of the time were just the opposite of what they should have been. Instead of relaxing deposit rate regulations, the policy was to extend the regulations to the thrift institutions; instead of broadening the permissable services the deposit institutions might offer, the policy was to keep these institutions tightly

restricted. Among other possible non-deposit avenues for competitive innovation, the banks conceived of new trust department services. The most important of these--shares in commingled agency accounts that resembled mutual funds--was doomed by attacks from the investment banking community.

Ensuing events are well-known. New services and new markets increasingly utilized banks as transactors and businesses and households increasingly found these new services to be preferred substitutes for traditional bank deposits. A market for commercial and finance company paper emerged in the 1960's, as did a fledgling Eurodollar market. As interest rates rose and transactions costs fell further in the early 1970's, NOW accounts and other forms of non-demand, yet checkable, deposits appeared. These were offered by non-bank deposit institutions, often in conjunction with at least one cooperating bank for purposes of clearing. Money market mutual funds were initiated in 1972 and 1973, but waited until the still higher rates of 1977-1980 for their explosive growth. Complex networks of electronic and telephonic payments systems underlie these markets, with the consequence that--as long as things run smoothly-- financial institutions, businesses and individuals do move funds about with the amazing rapidity reflected in the 2,755 per year demand deposit turnover rate.

Going back again, notice the "slap down" regulatory responses that have occurred. Increased use of registered bank holding companies to accommodate new services led to the 1956 Bank Holding Company Act, an act designed to prevent that phenomenon. When one-bank holding companies were tried, another act was passed (almost too late!) to stem that movement. Now we have the same (if temporary) reaction to so-called non-bank banks.

When large certificates of deposit were introduced as a competitive product to hold large depositors and attract new ones, the regulatory response was to make the product less attractive by subjecting it to Regulation Q. When some banks sought to serve the credit needs of their less well-known customers by accepting the contingent liabilities of bankers' acceptances, the regulator again intervened to prevent it. The courts, as noted, denied the competitive development of commingled agency accounts in the name of the hallowed Glass-Steagall provisions in the Banking Act of 1933. The application of Regulation Q--in the guise of preventing disintermediation between banks

and the thrifts--prevented either from slowing the disintermediation between them and the rest of the national and international money markets.

The same "slap down" continues in other directions. Because of anciently pronounced inhibitions, interstate branching is prohibited and interstate holding company acquisitions are limited to those approved by state laws. National banks are unable to avail themselves of even these opportunities. Commercial banks can underwrite only Treasury securities and the general obligations of state governments. Even the limited underwriting of commercial paper (and other traditional bank assets) is forbidden so long as the activity is interpreted to be underwriting. Cleverly subterfuged, something like commercial paper underwriting may--at least for now--be permissable. Similarly, while bank subsidiaries and subsidiaries of registered bank holding companies may engage in discount brokerage, banks in general are a long way away from being full participants in the business of distributing securities.

Questions about "securitization" are now being raised. The general idea of securitization is that a financial institution--itself, through a subsidiary, or through contractually arranged independent underwriting--uses some of its loan assets as collateral for another new security issue. There are two general forms of securitization. In one, the institution in effect sells a pool of loans. The new securities represent undivided interests in that pool. The institution whose loans are thus securitized subtracts the loans from its balance sheet and adds the dollar value of the cash it receives. In the second type of securitization, the new issues are borrowings, with the loan assets being used as collateral. Here the institution gains the cash proceeds from the borrowing but has a corresponding increase in its liabilities rather than a reduction in loan assets. The institution whose assets are securitized may use the proceeds to make new loans of the same sort, to change the character of its portfolio or, in the more dire cases, to facilitate its closing or absorption.

Instances of the securitization of the mortgages of thrift institutions are now relatively common. As the thrifts operate in this way, they approach being a mortgage banking operation. The securitization of commercial loans is also growing in popularity. Other assets--credit card receivables and automobile paper, for example--have also been used. Suggestions are now

surfacing for securitizing the third world loans of U.S. banks.

Obviously, to the extent that banks seek business customers wanting to place, say, commercial paper, advise these businesses of the appropriate terms and timing, buy (or guarantee a price for) the commercial paper, immediately re-package the paper as a new security and then sell and distribute that new security, they are doing what looks like overt underwriting. And, since these activities may violate the Glass-Steagall Act, that is where much of the current controversy about securitization lies. That is, as has been true for 50 years, the investment bankers do not want the commercial banks onto their turf.

What is wrong with securitization? If a commercial bank can make commercial loans and hold the paper to maturity, or alternatively endorse and sell the paper--as commercial paper--or borrow on the basis of the paper as collateral, why ought the bank not be able to contribute to improvements in the related markets. May it not solicit issuers of paper? May it not take title to the paper when its intent is immediately to resell? May it not solicit potential purchasers of the paper? May it not, as in securitization, use the paper as backing for a new type of security that may have a broader market? The answer to these questions seems to be in the negative although there is no reason obvious to me why from a policy point of view this should be the case.

There are, of course, some potential problems with securitization. The public may be misled and, indeed, defrauded in the absence of regulatory surveillance. The practice does increase the ability of banks to turn their assets more frequently, in effect making more loans from the same capital and deposit base. As has been true of other innovations, efforts by the Federal Reserve to restrict the availability of credit may be offset--even more than offset--by the consequent increase in turnover that these and other innovations are designed to accommodate. The deposit insuring agency and other regulators may have a legitimate interest in the nature of the liabilities, if any, that remain with the institution whose assets are securitized.

Note, however, that these genuine concerns will not be made less relevant

by prohibiting banks from directly participating in securitization. If the underwriting functions are handled by an investment banker, all of these problems remain. Further, the concerns will not be made less relevant by attempts to outlaw securitization. The latter would surely punish the banks desiring to securitize their assets, but it would not prevent the development of essentially the same thing being done without bank involvement.

It has been my view for many years that both regulators and legislators have a positive role to play in the regulation or de-regulation of the marketplace. It is not enough for laws and regulations to arbitrate the differences among existing vested interests. In truth, the commercial bankers--or most of them--are as responsible as the investment bankers--or most of them--for the continued impasse in public policy in this area. It is time for the Congress and the regulators to act, even with the recognition that many of their constituents in these communities will be less than pleased.

This Committee, Mr. Chairman, has led the way before and I urge it to do so again. The archaic vestiges of Glass-Steagall real'" must give way, along with a number of other restrictions of equally dubious merit. The deposit institutions have an important place in bringing to the public the new financial products and services that technology now permits.

THE EFFECT OF TECHNOLOGICAL CHANGE ON FINANCIAL STRUCTURE

David Taylor
Bank Administration Institute
October 14, 1987

Introduction

Advances in technology have substantially changed the mechanisms by which investment funds flow from suppliers to buyers in the world economy. Information flows back and forth between buyers and sellers through a vast network of on-line data bases, voice and data networks, satellite communications and electronic exchanges. Market analysis and product specialists equipped with sophisticated computer models, interact with this network to analyze risk and return variables for investors. It is clear that the primary characteristics of capital markets today are liquidity and efficiency.

The nature of these markets stands in sharp contrast to conditions that existed 50 years ago prior to the development of computers. This process of change has significantly altered the more traditional roles of financial intermediaries. Notwithstanding their higher levels of efficiency, these organizations will find it increasingly difficult to compete with electronic markets.

It is the purpose of this paper to briefly review the emergence of technology in the financial services field and to assess its significance in the growing trend to securitization.

Product Changes

There is widespread agreement among leaders and experts in the financial services field that major changes in the cost and availability of information in recent years have had a profound effect on the traditional business of commercial banking. These effects were first observed in the substitution of commercial paper for short-term bank debt. This shift in financing sources produced explosive growth in commercial paper borrowings by the nonfinancial corporate business sector between 1974 and 1985 and the trend has continued more recently. Furthermore, there is some evidence that in the future, even medium sized companies may meet more of their short-term borrowing needs with commercial paper. The low grade commercial paper market is growing somewhat faster than the commercial paper market as a whole.

Similar developments are now occurring at the retail level where securitization of consumer receivables is rapidly developing. The growth of mortgage-backed securities has been extraordinary. The trend is now spreading to auto loans, consumer receivables, and student loans. Technological advances in transaction processing and record-keeping that permit the packaging of marketable units, are behind these fast moving trends. As a result, one of the most profitable areas of banking may be seriously diminished over the next few years and the traditional lending activities of banks are becoming less profitable.

Finally, a multitude of competitors are o..ering financial products such as: investment products, individual retirement accounts, credit cards, installment loans, and home mortgages. They provide multi-purpose investment and transaction accounts with features and interest

rates that are enabling them to capture banking's most profitable and least risky customers.

The Securitization Process*

It is apparent that originating a loan requires different skills and strengths — access to the customer, credit analysis, back-office work — than warehousing a loan, i.e., having the loan on one's books as an asset that needs to be funded either by borrowed money or by equity. In the past the functions of origination and maintenance were linked and banks provided both. With increased penetration of securities, the functions are uncoupled: the originator of a loan does not have to warehouse it, and vice versa. To better understand the competitive dynamics between a security and a bank loan, it is important to recognize the costs of providing these alternative credits. In understanding this analysis, we must realize that for a bank to earn an adequate return on the bank investors' equity, a significant spread between cost of funds and interest revenue is required. Conversely, the buyer of a security is usually interested in absolute percentage return, rather than margin, since the purpose of the security investment is typically the management of excess liquidity, not making a profit by a narrow spread. The different cost structures for making a loan through a bank or through a security affect the competitive dynamics between bank loans and securities, since the individual cost elements have different characteristics and trends.

The cost of back office work has shrunk dramatically, owing to the rapid reduction in the cost of computing. In the past 15 years a substantial decline in this cost has been noted and industry experts believe this trend will continue. The cost of information analysis is also declining, as a result of the decrease in data storage and sorting costs. Information gathering and processing costs are somewhat more complicated. For a low risk loan which typically would be a loan to a large AAA-rated company, the cost of information gathering and analysis is extremely low, because the required data are publicly available on electronic media which is cheap and readily available. Conversely, if one is dealing with a high risk loan, such as a smaller company or middle market loan, the costs of information gathering and analysis rise dramatically. Because the processing and information gathering costs have declined and seem likely to continue to do so, there will probably be additional substitution of securities for bank loans.

Declines in the cost of technology make it more affordable. A $10,000 investment in computer hardware today will buy more speed and power than was available for twenty times that amount 10 years ago. Therefore, processing power is no longer a barrier to entry to the financial services business and new competitors are forming.

*This material is based on a report titled, The Future of Wholesale Banking, published by Bank Administration Institute in 1986.

Present cost trends indicate that the cost to a business firm of issuing a security is shrinking in comparison with that of borrowing through a bank loan and, therefore, additional substitution of securities for bank loans is likely to occur. For this to take place, however, it is necessary that the investing public be willing to accept the new forms of securities that are being issued and to analyze their profitability. Recently, investors have indeed been buying considerably more complex and risky instruments than was previously thought possible. An example of the former would be the many new instruments that are being issued in the Euromarkets, such as the securitized interest rate cap bond and the various option features that are becoming more popular. An example of investors' acceptance of riskier instruments is the "junk bond" pioneered by the investment banking community.

Generally, banks are likely to remain competitive in the origination of high value added loans. Specifically, medium sized banks and regional banks will continue to serve a local clientele with lending and other financial services. Owing to the banks' cost of warehousing loans, however, it is likely that they will sell these loans to entities that are more efficient in the warehousing function.

The wholesale money center banks are likely to focus on activities that build on their existing expertise. They will remain competitive in the origination of high-value-added loans to large corporations, such as multinational project finance, and it seems logical that they will develop some expertise in placing these loans with final investors. It would also be logical for these banks to serve as clearing houses for loans originated by regional banks. A logical development would be that wholesale banks make and maintain a secondary market for sold loans.

Two factors are driving down the size of the banking system's highest quality loan assets: A continuing substitution of securities for bank loans, and the banks selling off their loan portfolios. Both factors are a result of the general trend to securitization, fueled by technological advances in the securities markets. As high quality credits are attracted to the securities markets, banks will lose this business and a long-term decline in the credit quality of commercial bank portfolios is likely to occur.

Role of Financial Intermediaries

Financial intermediaries such as securities brokers, mutual funds, money market funds, insurance companies, banks and thrifts perform two closely related functions: they process information and risk. In the case of the pure brokerage function, all that is required is an information data base containing the characteristics of both buyers and sellers. The larger the data base and the cheaper the technology required to maintain it, the more it will be likely to make for an efficient and profitable brokerage operation. Brokers assume market risk when they hold inventory but, in general, brokerage activities require a relatively small investment in physical or financial capital. In addition to the low cost and ease of entry, advances in technology have vastly expanded the capabilities of brokerage operations. Recent

The CHAIRMAN. Thank you, Mr. Taylor.

Mr. Walker, when I introduced the other members of the panel, you weren't present, but let me say you are a professor of finance at Georgetown University.

Mr. WALKER. Yes, Senator, I wish I could claim I was caught in a Washington snowstorm, but in fact I was caught in the traffic.

The CHAIRMAN. Well, we are delighted to have you here, and I have a particular reason for feeling that way. My son, who went to Georgetown Law School, passed his bar exams yesterday, which is the biggest moment in my life since I was elected to the Senate in 1957.

Mr. WALKER. I am delighted to be here.

The CHAIRMAN. So we are delighted to have you.

Mr. WALKER. I am delighted to hear that. I remember Senator Garn speaking at one of our conferences that I was involved with in March, so we have a strong affiliation with the committee.

Senator GARN. Well, I went to Georgetown Hospital last year and didn't enjoy it at all. [Laughter.]

Mr. WALKER. I remember that.

STATEMENT OF DAVID WALKER, PROFESSOR OF FINANCE, GEORGETOWN UNIVERSITY, WASHINGTON, DC

Mr. WALKER. I am delighted to join you today to discuss the implications of new technology for the structure and regulation of banking.

With the reports in the media this week on Salomon Brothers phasing out domestic municipal bond, commercial paper, and mutual fund operations to concentrate on global markets and Morgan Guaranty considering a bid for the securities unit of Hill Samuel, a British Merchant Bank, it was very interesting to prepare these remarks on financial and technological innovation.

FINANCIAL INNOVATIONS

Most financial innovations have evolved in the past 10 years as a reaction to macroeconomic conditions in the United States. In the late 1970's and early 1980's, the hyperinflation was accompanied by record high interest rates and high rates of return that depositors could obtain in unregulated markets.

High aggregate income and employment in the 1980's have provided consumers with substantial resources to invest in a wide range of personal assets.

The financial innovations in the past decade can be considered in the framework for institutions of liabilities, capital and assets.

The modern liability innovations began in 1978, when the Congress and financial regulators authorized 6-month $10,000 money market certificates of deposit to enable depository institutions to deter this intermediation and to compete with the 6-month Treasury bills and their high rates.

Authorizing nationwide NOW accounts and phasing out regulation Q in 1980 allowed regulated financial institutions to compete with institutions that were circumventing regulation. Interest bearing transactions accounts were already being offered by money

market mutual funds, many institutions in New England and many credit unions.

The phaseout of regulation Q also encouraged depository institutions to offer variable rate certificates of deposit. The money market deposit account authorized by the Garn-St Germain Act enabled depository institutions to compete directly with money market mutual funds.

Depository institutions have become more creative in attracting new capital with three approaches:

No. 1, they need to satisfy regulators' increasing capital requirements;

No. 2, to meet shareholders' pressure for high returns, and;

No. 3, to respond to recent tax law changes on the treatment of dividends and interest income.

Two important recent capital innovations for financial institutions are Dutch Auction Preferred Stock and Spins. Each of these instruments adjust shareholders' returns to a market return at a regular interval without diluting the ownership control of common shareholders.

INSTITUTIONS ARE REDUCING RISKS

Financial asset innovations are much of depository institutions' current focus. The institutions are reducing their asset portfolio risk with three related approaches.

Institutions are: No. 1, switching from fixed to variable rate returns on their assets;

No. 2, securitizing and liquidating numerous assets so that they can originate and service new loans, and;

No. 3, circumventing the Glass-Steagall Act and other regulations to participate in a wider range of financial activity.

Each of these activities has an important characteristic in common. They reduce institutions' financial risks.

One of the earliest efforts for depository institutions to diversify their asset risk was the introduction of alternative mortgage instruments which caused mortgage borrowers to share interest rate risk with lenders.

Commercial banks are also placing an increasing portion of their commercial and industrial loans with variable rate commitments.

Perhaps the most popular new financial asset for depository institutions is the home equity loan, offered as a variable rate substitute for a wide variety of consumer loans on which interest expense tax deductions are being phased out.

Securitization is an alternative to variable rate lending that enables the institution to remove assets from its books and to convert illiquid assets into capital market instruments.

Asset securitization really began with the introduction of mortgage-backed securities early in the 1970's.

CARS, certificates of automobile receivables, and CARDS, certificates for amortizing debt, are two of the most recent asset-backed securities that enable institutions to liquidate automobile loans and credit card receivables, respectively.

Approximately $16 billion in CARS and CARDS have been issued in the past 2 years.

The U.S. Small Business Administration now participates in three securitization programs to increase resources available to small firms.

While securitization and variable rate lending adjust asset portfolios, institutions are preparing to offer new financial services previously restricted by the Glass-Steagall Act.

Large and medium sized commercial banks and major thrift institutions are offering or preparing to offer securities underwriting, investment banking, and discount brokerage services.

In its first pronouncements of the current session, the Supreme Court has let stand two lower court rulings that permit State nonmember banks to operate securities subsidiaries and to evade the securities underwriting restrictions of the Glass-Steagall Act.

This ruling gives state nonmember banks an immediate competitive advantage over State member and national banks. Although the Competitive Equality Banking Act of 1987 limits the immediate effects of the Supreme Court decision by the moratorium on new securities powers for banks, the moratorium expires in less than 5 months.

The Congress can eliminate a great deal of the uncertainty and avoid the inefficiency of institutions changing their financial regulatory status, as many did in the late 1970's, by allowing all insured depository institutions to participate in securities underwriting activities of investment quality debt and Money Market funds.

Technological innovation is an integral part of financial innovation because technology determines the delivery of new services.

The applications of computer-based technology have changed the production and delivery of American financial services into a modern, sophisticated payment system.

The economics of electronic versus paper-based financial transactions are the driving force for the implementation of electronic transactions.

A sophisticated electronic payment system involves high fixed and low variable costs. The average cost per electronic transaction declines with transactions volume increases. Most institutions do not charge a fee for electronic transactions through their own terminals to promote higher transactions volume and lower production costs per transaction.

Charging high fees for paper-based transactions or any transaction that is not completed using a delivery system that is most efficient to deliver is a likely future occurrence.

Data from a number of my research studies show that electronic transactions are most efficient for an institution to produce and deliver. An automated teller system of 100 machines that completes 2,000 transactions per machine per month for a $500 million bank can produce electronic banking transactions at an average cost of approximately 30 cents per transaction. The marginal cost of an additional transaction is approximately 5 cents.

In contrast, the estimated cost of cashing a check in a bank when all costs are considered is approximately $1 per transaction, and transactions that involve several banks often cost more than $2.

Moreover, if electronic cash withdrawals had not become a popular substitute for checks, the number of checks processed in the

United States would be taxing the capacity of the Federal Reserve processing system.

For the U.S. economy the Treasury could promote efficiency by offering public collection and disbursement services at no cost only if the recipients would accept the most efficient means of the service the Treasury could deliver.

The technological developments are not precluding the participation of small and medium sized institutions. The small institutions have offered some of their electronic banking services for 15 years, and they have shared network systems with larger institutions. The larger institutions share their systems and increase the transactions volume over which they spread their costs.

Consumers are the main benefactors with greater convenience and more financial products and service available to them. Financial and technological innovations today are likely to lead to fewer, larger, more homogeneous financial service firms that compete directly with one another.

Financial markets will not be less competitive. A market with several hundred large financial service firms may be more competitive than a market with thousands of smaller firms and a few large ones.

The major regional depository institutions are competing effectively with many money center banks in a number of product markets. Several of the money center banks are acquiring weak institutions outside their home region, and others are establishing some investment banking services.

With continuing——

The CHAIRMAN. Mr. Walker, could you wind up in about a minute or so?

Mr. WALKER. I will.

The CHAIRMAN. Thank you.

Mr. WALKER. With continuing deregulation and expansion of financial services based on financial and technological innovations, the competitive structure of financial services in the United States will be maintained.

In conclusion, the economic and regulatory climate is stimulating financial and technological innovations. In most instances lack of regulation or deregulation have encouraged innovation. Deregulation in the 1980's enabled and encouraged new instruments to be brought to the marketplace.

There is now vigorous competition among large depository institutions and investment banking firms. One of the remaining needs is to modify the Glass-Steagall Act to eliminate the advantages the courts have recently given to state nonmember banks and to allow depository institutions and investment banks to compete in areas where they can do so effectively.

I appreciate the opportunity to join your discussion today.

Thank you very much.

[The complete prepared statement of David A. Walker follows:]

notable examples that illustrate this process are the rapid growth in discount brokerage operations and the development of money market mutual funds.

In their role as information processors, banks perform not only a critical brokerage function of processing the credit claims of society, they also perform a vital role as transaction processors. By expanding financial markets, the trend to securitization has opened the doors to a growing number of financial intermediaries who perform many of the same functions that banks perform and do it more cheaply. That is, they gather funds and invest them through existing payment and market systems. Unlike the banks, however, they are able to carry out these activities while avoiding any cost for the development and maintenance of the infrastructures. In order to continue to grow, develop and remain competitive, the U.S. economy must support continued investment in the operational systems that represent the major conduits for trade and commerce.

Financial intermediaries also process and assume a variety of risks in the course of their business. Credit risk, interest rate risk, and operational risk are present at all times and are inherent in the banking system. The art of banking involves spreading, balancing and diversifying these risks in a variety of ways. However, the existence of a growing securities market where high quality, standardized, and well-known borrowers are drawn away from the banking system, leaving more complex and riskier credits, poses a real threat to the soundness of the banking system. An insurer would not wish to have one of his agents writing standard policies in a high risk group. Likewise, banks must maintain diversified loan portfolios in the face of a technological trend that favors the securities markets.

It is important to draw a distinction between the telecommunications-based systems that connect markets and trading centers with the transaction processing systems that operate in the "back room" of financial institutions and processing organizations. In most businesses, a natural tension exists between the sales and marketing organizations on the one hand, and the operations and manufacturing groups, representing the processing side. This tension is evident with respect to rapidly expanding financial markets in which new types of financial instruments are developed by investment bankers and lawyers — instruments that are designed to appeal to specialized groups of investors and to take advantage of unique and specialized marketing opportunities around the world. Just as the ticker tape is a highly visible form of daily activity on our nation's stock exchanges, so the enormous processing burden generated by that trading activity must be processed in computer rooms and offices each night by operations groups that are essentially invisible but clearly indispensable to the performance of these markets.

The rapid growth of financial markets and the new and increasingly complex financial instruments that are traded in those markets have raised the levels of operational, control, and settlement risks

associated with the clearing, processing, and record keeping functions that underlie these financial markets. Banks have a very large share of the processing business in the mutual fund industry. Through their corporate trust departments, they also act as clearing and disbursing agents for a large proportion of the nation's securities issues. Their operations in the foreign exchange and treasury securities markets are critical to the smooth functioning of financial markets, and their settlement position with the Federal Reserve System provides for final settlement of the nation's financial balances. With respect to the safety and soundness of financial markets, one would question the continued separation of the product development, marketing, and trading functions that exist in investment banking firms from the processing, control and settlement functions that exist largely among the commercial banks of this country.

Audit and control processes lag innovation by extended periods of time. Computer technology, with all of its power and flexibility, must be designed and programmed to carry out specific functions. Banks have demonstrated the technical capability and reliability to develop and maintain these high performance systems. However, product design and operations ultimately must be accountable to one another.

Summary

Information that affects financial markets is widely and instantly available. Modern data base management and information processing technology provide the means for computers to handle enormous amounts of information that affect the markets for securities. Not only can this data be efficiently managed, it is also transmitted to market participants instantly through the modern telecommunications channel. In an earlier era, commercial banks may have enjoyed a privileged position in these markets, but the growth of technology has ushered in an era of high market efficiency.

Telecommunications has broadened these financial markets. High speed lines directly connect investors worldwide with brokers on all major exchanges. Services such as Quotron, Telerate, and Reuters allow instantaneous feedback on transactions and prices. This immediate transaction capability has increased market efficiency by allowing them to adjust immediately to activity. These developments have reduced the once present dangers of consolidation and concentration in financial markets. The international community now comprises the new financial markets. Technology is also serving to blur the barriers between commercial and investment banking operations as securities trading becomes more highly automated, more securities are traded on the basis of electronic book entry and investment securities take on more of the characteristics of transaction accounts.

FINANCIAL AND TECHNOLOGICAL INNOVATION

Testimony before the U.S. Senate Banking Committee

October 14, 1987

David A. Walker
Professor
Georgetown University
Washington, D.C.

INTRODUCTION

Much of the recent development of the U.S. financial services industry has been the result of institutions applying financial and technological innovations as a reaction to changing aggregate economic conditions. Congress, the Courts, and financial regulators have modified or eliminated many restrictions over the past ten years so that depository institutions could offer new or more efficient financial services as well as compete with unregulated firms.

The following discussion of financial and technolgical innovation reflects on the developments of the past decade and the likely future directions for U.S. financial institutions. For the financial system to continue to serve consumers, industry, and the public sector effectively, further innovations must be encouraged and supported.

FINANCIAL INNOVATION

Financial innovation is the development of new financial products and services offered by private and public institutions. Most financial innovations have evolved in the past ten years as a reaction to macro-economic conditions in the U.S. In the late 1970's and early 1980's the hyper-inflation was accompanied by record high interest rates. The high rates of return that depositors could obtain outside of regulated financial institutions forced institutions to offer high rates on deposits and new capital instruments or to face disintermediation.

High aggregate income and employment in the 1980's have provided consumers with substantial resources to invest in a wide range of personal assets. Depository institutions now must compete for funds with diverse investment opportunities such as real estate trusts, small business partnerships, commerical paper, and overseas deposit accounts.

Financial innovation has been stimulated in the U.S. by the combined efforts of legislators and regulators to allow more creativity and diversity among depository institutions. The more permissive financial environment has encouraged institutions to react to the changing economic climate.

The major financial innovations of the past decade can be considered in a framework of institutions sources and uses of funds. The sources are depositories' liabilities and capital accounts. The institutions employ their resources primarily to hold assets of investments and loans.

Liability Accounts

The modern liability innovations began in 1978 when the Congress and the regulators were forced to react to disintermediation from depository institutions into Treasury bills. High inflation and interest rates enabled investors to earn higher rates on Treasury bills than on regulated

institutions' depository accounts. Banks, thrift institutions, and credit unions were permitted to introduce six month $10,000 Money Market Certificates of Deposit with interest rates and other terms similar to those on six month Treasury bill rates. These certificates were authorized so that the institutions could respond to the competition from Treasury bills, which were attracting insured deposits.

The attraction of high interest rates on deposits outside the banking system was also a primary factor in some provisions of the Depository Institutions Deregulation and Monetary Control Act of 1980 (DIDMCA) and the Garn-St. Germain Act of 1982. Authorizing nationwide NOW accounts and phasing-out regulation Q allowed regulated financial institutions to compete with institutions that were circumventing regulations. Money market mutual funds, some depository institutions in New England, and many credit unions were already offering interest bearing transactions accounts.

The phase-out of regulation Q enabled depository institutions to offer competing interest rates with alternative investments for depositors. Depositors had begun moving their savings into money market mutual funds, commercial paper, Eurodollars, and many other short term investments on which market interest rates were offered.

DIDMCA also encouraged depository institutions to offer variable rate certificates of deposit. Although some of these deposit accounts were not specifically restricted previously, the phase-out of regulation Q encouraged the institutions to respond to market interest rates on competing funds.

The money market deposit account (MMDA), authorized by the Garn-St. Germain Act, enabled insured depository institutions to compete directly with money market mutual funds for deposits. As insured accounts at customers' neighborhood institutions, the MMDA has deterred some further diintermediation into mutual funds.

The various financial innovations among liability accounts over the past decade have enabled insured depository institutions to compete with other institutions to attract and maintain funds. The costs of attracting the funds, however, have risen dramatically, and depository institutions have been forced to pursue higher returns on their asset portfolios.

Capital Accounts

Depository institutions have become more creative in attracting new capital to satisfy regulators and shareholders and to respond to recent tax law changes and changes in capital market conditions. Financial regulators have required depository institutions to increase their capital toward six percent of total assets. The Deficit Recovery Tax Act of 1984 and the Tax Reform Act of 1986 have changed some of the treatments of stock dividends and interest on capital notes. Existing shareholders do not want their ownership control diluted; therefore, many depository institutions have begun issuing new preferred stock and capital notes rather than additional common stock. These developments have required depository institutions to compete in a

variety of markets to attract new capital. The institutions have become more innovative and created new capital instruments.

Issuing preferred stock is again popular for depository institutions, although this was not the case for several decades. During the Depression commercial banks in danger of failure issued preferred stock to attract new capital and offer a priority claim over common stockholders. For many years, the experience from the 1930's discouraged banks from raising capital with preferred stock for fear of an implication that the bank might be in financial difficulty.

Three recent capital innovations for financial insitutions are the development of adjustable rate preferred stock (ARPS), Dutch Auction Rate Preferred Stock (DARPS), and Spins. For each of these instruments, the focus is to adjust the shareholders' returns to a market return at a regular interval.

ARPS were first issued by Chase Manhattan Corporation and Manufacturers Hanover Trust Company in 1982, and DARPS have replaced these issues since 1984. Dividend rates on these preferred shares are floating rates, which are re-established every seven weeks with reissue among previous and potential purchasers. The reissuance adjusts yields on the preferred stock so that the dividend yield risk is reduced and the value of outstanding shares approaches the par value of the stock.

Although the market for DARPS was initially dominated by large commerical banks, thrift institutions have now become major issuers of DARPS (American Banker, August 21, 1987). Preferred stock with variable dividend rates are now issued under a variety of names including Sabres, MMPs, RPs, and Stars by many financial organizations and institutions.

A Spin is a capital note for which the interest rate is increased as a function of increases of the Standard and Poor's stock index. In the past month Chase Manhattan Corporation has issued Reverse Standard and Poor's 500 Index Notes, known as Reverse Spins, which are capital notes whose interest rate varies inversely with the Standard and Poor's index (see American Banker, September 16, 1987); if the index falls, the interest rate on the notes rise. Spins and Reverse Spins are likely to become more popular as variable rate capital notes because large fluctuations in the traditional stock market indices are quite frequent and no longer occur only in response to economic shocks and political calamities.

Asset Accounts

Financial asset innovations are much of depository institutions current focus. The institutions are striving to reduce their their asset portfolio risk with three related approaches. Institutions are: (1) switching from fixed to variable rate returns on assets they hold, (2) securitizing and liquidating numerous assets so that they can originate and service new loans, and (3) circumventing the Glass-Steagall Act and other regulations so that

institutions can participate in a wider range of financial activities. Although these three activities are not often considered together, each provides a financial institution with a more diversified and less risky asset portfolio.

The financial innovations that are evolving on the asset side of depository institutions' balance sheets are moves toward obtaining market returns as they incur market costs for funds. Many of the innovations circumvent regulations or restrictions that are not market-based restraints.

One of the earliest efforts for depository institutions to diversify their asset risk was the introduction of alternative mortgage instruments by state insured savings and loan associations in California in the 1970's. This circumvertion of Federal regulations led Federal regulators to permit alternative mortgage instruments for all insured depository institutions. Today, the alternative mortgage instruments include adjustable rate, graduated payment, wrap around, and shared appreciation mortgages among others. For some real estate transactions, there are now more than 70 potential variable rate and alternative mortgage instruments.

Savings and loan associations have been the main benefactors of alternative mortgage instruments because borrowers now share much of their interest rate risk. Without the introduction of the alternative mortgage instruments, the thrift industry would be in even worse financial condition that it is today, although that cicumstance may be difficult to imagine.

Commercial banks are placing an increasing proportion of their commercial and industrial loans with variable rate commitments. Commercial lines of credit have traditionally been priced in relationship to the prime interest rate. Large, longer term loans to major borrowers are also beginning to be placed at interest rates that fluctuate with lenders' costs and aggregate or regional economic conditions.

Perhaps the most popular new financial asset for depository institutions in 1987 is the Home Equity Loan, which is being offered as a response to provisions of the Tax Reform Act of 1986. Home equity lines of credit are substitutes for a wide variety of consumer loans, overdrafts, and lines of credit on which interest expense tax deductions are being phased-out. Virtually every home equity loan is offered as a variable rate loan, with interest rates determined as a function of the prime rate, a Treasury security rate, or the lender's cost of funds.

Securitization is an alternative to variable rate lending for depository institutions. With variable rate loans, borrowers share interest rate risk with lenders, but securitization enables an institution to remove an asset from its portfolio.

Securitization of assets is the process by which illiquid assets are converted into capital market instruments. This approach to asset portfolio management is a financial innovation for many depository institutions.

Asset securitization began with the introduction of mortgage-backed securities in the 1970's. This innovation dramatically changed the asset portfolios of thrift institutions before DIDMCA allowed thrift institutions to diversify their asset portfolios with some consumer and commerical loans. Mortgage backed securities have been easier to originate than many recent securitization because mortgage terms are relatively homogeneous in their interest rates and initial time to maturity.

As the secondary mortgage market has become more sophisticated, collateralized mortgage obligations (CMOs) and other mortgage related securities have become popular. The Tax Reform Act of 1986 authorizes Real Estate Mortgage Investment Conduits, which are not in conflict with some tax complications that CMOs involved. (See Rosen, 1987.)

CARS — certificates for automobile receivables — and CARDS — certificates for amortizing debt — are two of the most recent asset-backed securities that enable depository institutions to liquidate their automobile loans and credit card receivables, respectively. Approximately $15 billion in CARS, $1 billion in CARDS, and $1 billion in securities backed by computer leases and heavy duty truck loans have been issued in the past two years (see Person, 1987).

The U.S. Small Business Administration (SBA) has participated in developing three securitization programs to increase resources available to small firms. The SBA serves as issuor or guarantor of securities whose proceeds are funneled to small business. The first program began with pooling and selling small business loans. The focus of this program is to enable pool assemblers to assist small businesses to obtain loans for a considerably longer period of time than traditional lenders offer small firms. This program assembles relatively homogeneous loans that are easier to pool than heterogeneous small business loans. A typical pool is $2.5 million with between eight and ten loans to different small firms.

The SBA guarantees debentures for Small Business Investment Companies (SBICs), which borrow capital on behalf of small business at low fixed interest rates. The Certified Development Company Program is another SBA supported program that issues debentures and trust certificates guaranteed by the SBA to stimulate local business development. Debentures for individual businesses are pooled and sold as a unit in this program in a similar manner to the SBIC debentures.

Securitization of assets should become especially attractive to thrift insitutions that take full advantage of the provisions of DIDMCA to diversify their asset portfolios. Nearly every major asset in a thrift institution's portfolio might now be liquidated through securitization. This may be part of the solution to the solvency problems of the nation's thrift institutions as securitization of equipment leases, automobile loans, and credit card receivables joins secondary mortgage markets to liquidate thrift asset portfolios.

Securitization of financial assets has some similar characteristics to asset swaps and institutions' activities in financial futures and options.

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The CHAIRMAN. Well, thank you very much, Mr. Walker.

Mr. Fisher, I want to return again to the delightful story with which you concluded your remarks, and of course you are absolutely right about the fantastic change in technology.

Yesterday we were impressed also by another point that I would like you to comment on, and that is the enormous increase in the volume of securities underwriting and trading. You don't have to go back to the 1930s; the growth just since 1975 has been astounding. In addition, securities markets have become global. That was mentioned by some of the witnesses today, but a very important aspect of the increased competition of course has been that vast and rapid increase in competition because of the technology that makes it possible to have 24-hour markets and the like.

In view of these additional changes, don't you feel that there is an even more urgent need for action by the Congress to allow the full modernization of an industry which is, as you point out, still operating with a medieval technique?

Mr. FISHER. Without question, Senator. The pace of change has increased dramatically. Our organization introduced the first automatic teller machine on Columbus Day. That was celebrated in our town Monday of this week. We declare a national holiday to mark

this unique time in history when the automated teller machine was introduced to society.

We have other reasons for celebrating, but that was not yet 2 decades ago that that device was first introduced to America.

It took about a full decade to get 8 percent of society to accept that innovation. I recall about 1979, 8 percent of our transactions in our organization were being handled through self-service devices.

Today it is a little over 30 percent. There are banks in our country today that have over 50 percent of their transactions handled through self-service devices, and our predictions are that as we push into the 1990's, half of America will be waiting on themselves, using this unique new technology.

Particularly, we believe that the pace of change will be increased, as I have indicated in my testimony to you, as the companion piece to the automatic teller machine finally arrives in the marketplace, the long-promised point of sale systems, and my testimony is directed at that anticipation.

The automated clearing house, which is a slightly different technology but nevertheless is a companion to the electronic systems, has likewise encouraged America to use these new advanced technologies more dramatically.

About 40 percent of all Government checks today are handled through the ACH. That delivery system was made available only a decade and a half ago.

The CHAIRMAN. In asking my question, I was focusing less on the technology that you have done a superb job of describing, than on the fact that the technology can be particularly efficient because there has been such a colossal increase in volume.

Mr. FISHER. Yes.

The CHAIRMAN. I guess as in any operation if you automate it and the volume increases, then you have a sharp diminution in the cost, don't you?

Mr. FISHER. I agree with your comment, Senator, and I was trying to come up with a statistic that might help prove your case.

When I joined the banking industry, the society was just at that time learning how to write checks, and the average check for the American consumer in the 1960's was about 8. Today the average check—and this addresses your transaction comment—is about 25 a month.

So the transaction burden in the system is amazing today, and absent technology, obviously we would not be able to handle what is asked of us, and we see that technology requirement in the future increasing as America's requirements increase.

The CHAIRMAN. Professor Phillips, we have started to draft legislation to meet the problems that you are raising, and I have the major provisions of the bill that we have drafted in front of me at the moment.

One of the things we would do is of course separate the bank from any affiliate that would underwrite securities by restricting transactions between the bank and the affiliate.

How would you regard such restrictions? Should we impose them to prevent conflicts of interest and promote safety and soundness?

Mr. PHILLIPS. Senator, the requirement of a separate subsidiary, either within the holding company context, a nonbank subsidiary or bank holding company or a subsidiary of the bank to carry on these functions, seems to me to be necessary for regulatory purposes if for no other.

Absolute prohibitions of the subsidiary from dealing with its parent or other subsidiaries of the same organization impress me as going too far, frankly. I would agree that the intent of preventing transactions that may pull a bank down or put burdens on the depositors and the deposit insurance organizations is commendable, but I think that there may be some efficiency gains internal to the organization for permitting some dealing among themselves, and I would—that is my initial reaction.

I have not seen your legislation, but——

The CHAIRMAN. Why take that chance? Why shouldn't we have a separation? It seems to me that we are asking for trouble if we don't limit lending by the bank to the securities affiliate and purchases of securities by the bank from the securities affiliate. Abuses in those areas are what the Congress focused on when it passed the Glass-Steagall Act.

Mr. PHILLIPS. I am sorry, is this restricted to the underwriting or to dealings among the subsidiaries generally?

The CHAIRMAN. I am talking about underwriting affiliates.

Mr. PHILLIPS. I am sorry. I am sorry, I didn't realize that.

I think that with respect to the underwriting subsidiaries that not allowing them to underwrite for other members of the same organization is probably commendable.

The CHAIRMAN. Thank you.

Mr. Bryan, why do you think securitization results in better credit judgments than conventional bank lending?

Mr. BRYAN. Well, the functions of securitized credit literally unbundle the functions which have been bundled in an individual bank, and so instead of the same bank originating, approving the credit, and having the deposit, you have those functions often played by literally different institutions, each of which have to make sure each step is sound.

In particular, most securitization of credit requires credit enhancement which provides someone to watch over the originating function. So you have got someone who is very skeptical looking over the credit because all they care about is whether or not the fee being paid is commensurate with the risk being taken.

And second, you have a rating agency usually required to look over the documentation and the credit underwriting to make sure the public is protected.

The CHAIRMAN. How about the diversification element?

Mr. BRYAN. Well, the diversification is also a very fundamental avantage of securitized credit for example, let me give you a personal example. I am from Oklahoma originally. I have had the misfortune to watch every bank in my home city of Norman fail.

Now, these banks had very poor lending alternatives. They could lend to independent oil producers. They could lend to real estate developers or they could lead to farmers. It was very hard to make good loans to these types of borrowers in early 1980's.

Through securitization of credit, you can take such credit risk and diversify it broadly. I believe we would not have had the kinds of problems we have in the Midwest and the Southwest if a securitized credit system had been in place because I think the people looking over other people's shoulders would first of all, have not accepted the risk. However, even if they had taken the risk it would have been spread throughout the credit system as opposed to being concentrated regionally.

The CHAIRMAN. Mr. Taylor, you say on page 5 of your testimony:

> By expanding financial markets, the trend to securitization has opened the doors to a growing number of financial intermediaries who perform many of the functions that banks perform and do it more cheaply.

Now if these new financial intermediaries can perform many of the functions banks perform more cheaply, why should that be a concern to us a public policy concern that Congress should address?

Mr. TAYLOR. Mr. Chairman, I think the point that I was getting at there is that the technology has completely changed the way the financial services business is being conducted.

The cost of technology has declined at such a rate that a vast array of new providers are appearing on the scene—organizations, business firms—that can provide a wide and vast array of financial services to the public, both the investing public and the depositing public.

The concern, I think, from a public policy point of view is that the Nation's banks are still the repository of the Nation's financial system. They are inextricably linked to the Federal Reserve. They provide the credit to the Nation, and as that business is dissipated through advances in technology, as that business is gradually broken up into ever and ever smaller pieces, I believe that we face a serious problem with the diminution of our banking system.

The CHAIRMAN. Thank you so much.

My time is up.

Senator Garn.

Senator GARN. Thank you, Mr. Chairman.

Mr. Phillips, you mentioned the Financial Institutions Act, FIA. I was here at that time as a new freshman and sat way over there I supported Chairman Proxmire and Tom McIntyre in the passage of that bill twice and, as you know, the House of Representatives wouldn't consider the legislation.

Here we are again, in the same sort of situation, 13 years later. As a new freshman convinced that we needed to make dramatic changes at that time—and 13 years later we essentially have made relatively little changes.

Even Garn-St Germain was sort of an accident as I look back now—maybe not an accident, but I am not really quite sure how I got that through, considering that then again in 1984 we passed a bill with Chairman Proxmire's help 89 to 5 on the Senate floor and the House wouldn't pass it.

So it is a little bit difficult for me to believe that if 13 years ago some of us thought dramatic change needed to be made that we are still unable to convince Congress to make those choices.

If you think about Mr. Fisher's comment about his airplane trip. Can you imagine how I felt orbiting the earth at Mach 25? I didn't

think very much about Glass-Steagall up there. But I remember thinking isn't this amazing, here I am, chairman of the Senate Banking Committee, up here orbiting the earth at 25 times the speed of sound and I can't get Congress to change a 50-year-old law that was passed when I was about 7 months old.

So I appreciate your comments on the need for change. I am not even capable of understanding now why the chairman and I can't convince Congress that something needs to be done. It is unbelievable. It is almost more unbelievable than the opportunity I had to fly in space at 17,500 miles an hour.

FINANCIAL SUPERMARKET

Mr. Fisher, you appear to be a strong advocate of the financial supermarket concept where a consumer can obtain a full range of financial services at a single location.

What would be your reaction if we repealed Glass-Steagall but placed strong restrictions on cross-marketing of banking and securities products so that both types of products could not be obtained at the same office? Wouldn't we be defeating the purpose of repealing Glass-Steagall?

Mr. FISHER. Senator, I believe that arbitrary preclusion would be a disservice to the marketplace. Our experiences over the last 3 years with our experimental branches have found that the financial supermarket is suitable and beneficial in the marketplace.

Now, clearly not all markets. We have this targeted, as I had indicated, to about 20 percent of our facilities, but we do believe that the marketplace or a high percentage of them can benefit from being able to gain access to a broad array of services at a single location and that the arbitrary preclusion of cross-marketing would be a disservice.

One of our difficulties today, as I had indicated, is that we have an insurance broker and a real estate broker on site, and the laws are such obviously that we cannot even share a sign.

So we believe that to be the arbitrary preclusions that are totally unnecessary and not beneficial to the marketplace in the future.

Senator GARN. Mr. Bryan, how would you feel about it?

Mr. BRYAN. I think it is—it would be a mistake to prevent the shared cost advantages of a distribution point from being used to originate transactions. I think the risks from the transactions should be borne by nondepository institutions, either affiliates of holding companies or independent companies. I think the end result should be a holding company, that makes no distinction between a bank holding company and nonbank holding company.

I think nonbank holding companies should be allowed to own depository institutions and bank holding companies should be allowed to own securities firms. However, the risks should be borne by affiliates that do not have the Federal safety nets behind them. Origination should take place wherever the customer is best served.

Senator GARN. I don't really disagree with that.

Any other comments on that, Mr. Taylor?

Mr. TAYLOR. Senator Garn, if I may comment, I was in my local K-Mart store the other day. I go over there on weekends and do

some shopping for my garden needs. And, lo and behold, there sitting in the middle of the floor right where the paint used to sit at the K-Mart store is a new financial services center with an automatic teller machine and a nice little stand with a desk and a chair and a small table in the back. It was unmanned at that time on Saturday morning.

But I had to stop and pause and look at this. A new financial services center in my local K-Mart store right next to perhaps the blue light special, and I see from the signs and the postings there that they were going to offer a wide array of financial services—immediate transactions, insurance, savings accounts, transfers, and a variety of things.

So it seems to me that is a real indication, speaking to your point about permitting cross-marketing of securities and other financial services, it seems to me that is the real harbinger of things that are coming, that are here.

Senator GARN. Mr. Walker.

Mr. WALKER. Senator, if I might just comment for a minute, it seems to me that all we would be doing with the new legislation would be letting banks catch up with Sears Roebuck. In the Washington area and many other metropolitan areas, all the things that are possibilities with the legislation you are working on would simply enable the institutions to catch up.

I may be missing a point here, but I think there is a lot of competition already ahead of them.

Senator GARN. Well, certainly you illustrate the unfairness of what has taken place. I certainly could not have anticipated even a decade ago that we would have ATM's and K-Mart's and Sears doing full service banking, yet we keep telling the banks you can't do those things that everybody else in the world can.

Gentlemen, it seems to me—and correct me if I am wrong—that I could summarize all of your testimony today by saying that restrictions on bank powers and products are the result of legislation that was passed in a world that was totally different than the one we live in today; and, unless we modify or change or eliminate some of these restrictions to reflect this dramatic change in technology and other changes in the marketplace such as the globalization of the marketplace, won't traditional banking institutions become as obsolete as the Model T? Aren't customers going to go to all these other places, making banks as we have known them obsolete?

Is that a fair summarization of what we are talking about?

Let the record show that I see five heads nodding up and down. [Laughter.]

Thank you, Mr. Chairman.

The CHAIRMAN. Senator Riegle.

Senator RIEGLE. Do we know offhand, just as a follow-up to that, what percent of the savings in the country, savings deposits are still in banks versus any other kind of intermediary? Would the staff know that figure offhand?

The CHAIRMAN. Mr. Bryan knows it.

Mr. BRYAN. The flow of funds statistics show that in 1980, 60 percent of the nongovernmental debt was through the banking system, and now it is down to 53 percent. So it has been a decline of about

roughly a percent a year, and the flow of funds has been more securitized.

Senator RIEGLE. Now, would the flow of funds be the proper way to capture the question of savings type deposits? Is that——

Mr. BRYAN. Well, it understates the flow because some depository institutions have invested in securitized assets, and so it would not show the full impact of securitization. But all deposits would be fully captured in the flow of funds statement. So securitization would be a greater force than was shown by that number.

Senator RIEGLE. You know, let me just say, Mr. Fisher, that we are pleased to have Banc One in Michigan and about to go into Wisconsin and Lord knows where else. I mean you are climbing up that national——

Mr. FISHER. We would like to see more Senators here today so we could pick States more easily. [Laughter.]

Senator RIEGLE. When you describe—well, let me say one other thing just in terms of the fact that we are not—we haven't been totally asleep at the switch around here, although some may think we have been.

Back in the late 1970's it was this committee that produced the legislation on EFT at that time that really sort of broke the thing open and set up a situation where it was possible to go out and do the terminal system, which has obviously taken hold.

I think the statistics that you and others were citing there are really quite impressive statistics.

And clearly the effort on the part of the committee to try to decide what makes most sense in terms of the financial services structure for the future is a very serious one.

I compliment the chairman on his leadership here because we have really been working our way through this as best we can. It is not the only issue we are dealing with here, by any means, in terms of the Senate as a whole, but one of the most important ones.

I would like to go back to your example of your sort of one-stop financial supermarket concept that you are developing, I guess, in Ohio or you have been over the last 3 years, where you now have—in a bank outlet you have a travel agency, you have an insurance operation.

I take it the insurance operation is somebody else's?

Mr. FISHER. Right.

Senator RIEGLE. How does that work?

Mr. FISHER. We have a leased space arrangement with both the insurance agent and the real estate agent. All the other services that I had mentioned, including travel, are legally provided today, but in order to compete with retailers, which has already been alluded to, and to bring the benefits to the marketplace we believe we are required to do, the only way we can do that is through the leased space arrangement. There is no sharing of revenues or——

Senator RIEGLE. There is no sharing of revenues?

Mr. FISHER. No. Initially, the concept was introduced by us about 5 years ago, and of course as you are well aware there were State regulators around the country that believed even the leased space arrangement should be prohibited. The Comptroller then ruled that a national bank could in fact lease space.

Swaps, futures, and options are all financial innovations by which an institution attempts to exchange current interest rate risk for future returns with future risks. Whether the institution profits in these markets depends on its ability to forecast interest rates at the maturity of an investment.

While securitization and variable rate lending are means of adjusting asset portfolios for a depository institution, the institutions are also preparing to offer new financial services. Depository institutions are now placing a great deal of emphasis on activities that previously were restricted by the Glass-Steagall Act. Large and medium sized commerical banks and major thrift institutions are offering or preparing to offer securities underwriting, investment banking, and discount brokerage services.

In its first pronouncements of the current session, the Supreme Court has let stand two lower court rulings that have permitted state nonmember banks to operate securities subsidiaries and to evade the securities underwriting restrictions of the Glass-Steagall Act. This ruling gives state nonmember banks an immediate competitive advantage over state member and national banks.

If the Congress does not address this inequity, some Federal Reserve member banks will be tempted to give up their membership as many others did during the late 1970's. Between 1976 and 1979 several hundred banks resigned their Federal Reserve membership primarily because nonmember banks in 36 states had the advantage over member banks of holding interest earning reserves against their deposits. The decline in Federal Reserve membership was a major stimulus for the Depository Institutions Deregulation and Monetary Control Act of 1980 to provide for universal reserves and market-priced, open access to Federal Reserve services for all insured depository institutions with transaction accounts.

The Competitive Equality Banking Act of 1987 does limit the immediate effect of the Supreme Court decision by the moritorium the Act places on new securities powers for banks. Since the moratorium expires March 1, 1988, institutions are already preparing to implement new securities underwriting practices at their earliest opportunity.

The Congress can eliminate a great deal of the uncertainty and avoid the inefficiency of institutions changing their Federal regulatory status by allowing all insured depository institutions to participate in securities underwriting activity of investment quality debt, money market funds, and mutual funds. As Chairman Proxmire has stated, underwriting places an institution at risk for a short time and may be less risky than making traditional commercial loans (American Banker, September 25, 1987).

If there is no modification of the Glass-Steagall Act during this session of Congress, a great deal of resources will be misallocated to circumventing restrictions that will probably be revised later. The situation might be similar to the costs of the delays in dealing with the nonbank bank issue.

TECHNOLOGICAL INNOVATION

The efficient delivery of many new financial services will depend on the development of the technological systems in the financial services industry and the payments system. The technology available to and employed by the financial services industry has changed greatly in the past two decades. Automated tellers, electronic deposits, automated clearing, and wire transfers are becoming a regular part of consumers and corporations financial transactions. Although the U.S. has not become the cashless society, as futurists predicted twenty years ago, the applications of computer-based technology have changed the production and delivery of American financial services into a modern, sophisticated payments system.

The economics of electronic versus paper-based financial transactions are the driving force for the implementation of the electronic technology. The costs of producing the services have a major impact on what services are offered and how they are delivered.

Costs and Pricing

Recent technological and computer developments enable depository institutions to offer electronic financial services more efficiently than paper based financial services. Technological advances have made processing electronic payments and receipts less expensive than labor intensive transactions, and the differential is increasing. Cash withdrawals, automated deposits, direct deposit of payroll checks, dividend payments, and government disbursements can now be completed at lower costs electronically than the corresponding non-electronic transactions.

The economics of a technologically sophisticated electronic banking system involves high fixed and low variable costs. Average costs per electronic transaction decline with increases in transactions volume. Financial institutions are engaged in major marketing efforts to increase electronic banking transactions by encouraging consumers to switch from paper-based to electronic transactions. The result is significant cost savings to the institutions. Part of the marketing effort is adopting a pricing policy that induces more electronic transactions.

It is, therefore, not surprising that most commerical banks do not charge a fee for electronic transactions through their own terminals. This promotes a higher volume of transactions, which lead to lower production costs per transaction. To stimulate the use of the most efficient technology to complete transactions, institutions may begin charging high fees for paper-based transactions or any transaction that is completed using a delivery system that is not the most efficient (i.e., not the least costly) to produce.

Data from a number of studies show that electronic transactions are most efficient for an institution to produce and deliver. An automated teller

system of 100 machines that completes 2,000 transactions per machine per month for a bank with $500 million in assets can produce electronic banking transactions at an average cost of approximately 30 cents per transaction. The marginal cost of an additional transaction is approximately five cents. These costs are developed from projections of approximately ten years ago that have proved to be quite accurate (see Walker, 1978). The estimated cost for a bank to process a check that is cashed in the bank is nearly $1 per transaction, and checking transactions that involve more than one financial institution often cost more than $2 per transacton. Moreover, if using electronic banking terminals had not become a popular substitute for checks, the number of checks processed in the U.S. would now be taxing the capacity of the Federal Reserve check processing system.

Economic Efficiency

Financial institutions could promote economic efficiency by charging customers the full cost to cash a check or make a deposit at a teller's window and charging no fee for electronic cash withdrawals and deposits through automated tellers. Consumers' response to such a pricing system will increase economic efficiency. The volume demanded of the most efficient available service will increase and the average production cost of this service will decline because of the economies of scale. The volume will decline for the paper-based service that is more costly to produce. This same principle can be applied to the provision of numerous other financial services such as direct deposit versus paper-based payments that are received on a regularly scheduled basis.

For the U.S. economy, the public receipt and expenditure process would be more efficient if the Treasury would continue to offer public collection and disbursement services at no cost if and only if the recipients accept the most efficient means of service that the Treasury could deliver (see Walker, 1987). If a consumer, corporation, or public agency requires a service in a form that is not the most efficient for the Treasury to deliver, the demandant should pay the average cost of producing and delivering the service. The result would be that the quantity demanded of services produced in the most efficient manner would increase, the average cost of producing these services would decline with increases in quantity produced, and the aggregate public expenditure for providing collection and disbursement services would be reduced.

The Federal Reserve System encouraged more efficient use of check clearing services when it began pricing Automated Clearinghouse (ACH) services as a result of DIDMCA. The Fed priced ACH services under the assumption that the quantity of services demanded would continue to increase and the cost of providing each unit of service would decline as a result of the economies of scale from the technology. The ACH services, like other Fed services, are required to be priced on a cost plus basis, with an adjustment for the expenditures that a private sector competitor would incur beyond the Federal Reserve costs. The adjustment factor takes account of the cost of capital, taxes, and other free inputs the Fed would have to purchase if it were a private sector producer. The Fed's approach to pricing ACH services has

increased the quantity of electronic services demanded, which has lowered the average cost and increased efficiency of the payments system.

In the international arena, SWIFT (Society for Worldwide Interbank Financial Telecommunication) has continued to expand its message transfer system because it prices services below the prices to competing, less efficient systems. Although this may not be a short run profit maximizing strategy, it will promote long run efficiency and expansion of the SWIFT system.

Since its origination in 1973, SWIFT has expanded from 239 to 1,000 banks and several types of nonbank owners will now be permitted to joint the system. Shortly, securities brokers and dealers, recognized securities exchanges, and financial clearing institutions will be invited to join SWIFT. SWIFT already completes message transfers at a fraction of the cost of telex and cable message transfers, and consideration is being given to lowering prices to increase transaction volumes and to compete with deregulated telecommunications sytems.

Competition and Service

The technological developments that are occurring in financial institutions are not precluding the participation in the elctronic payments system by small and medium sized institutions. For the past ten years, small as well as large commercial banks have offered automated teller and electronic banking services (see Walker, 1980a).

Smaller institutions are not having difficulty competing with large banks as a result of the developing electronic technology. The small institutions have offered some of their own electronic banking services, and they have been able to share network systems that have been developed by larger institutions. The larger institutions have learned that sharing their systems increases the quantity of transactions over which fixed costs are spread. Among the major institutions, there is strong competition to sell electronic services to smaller depository institutions and private sector firms. The increased transaction volume lowers average transactions costs for all of the participants in the system.

Consumers are the main benefactors with greater convenience and more financial service products and service hours available to them. The number of locations from which consumers can complete banking transactions is virtually unlimited if they have a transactions or savings account with an institution that participates in a shared electronic banking system.

Two technological innovations that have not become very popular with American consumers are home banking and the Smart card. Home banking has not advanced to allow access from a wide range of personal computers, and rotary dial telephones cannot be used for the service. The failure of home banking to become popular is an example of what happens when only a small number of potential customers have access to a technology and standardized, homogeneous systems are not developed.

The Smart card is a technolgical innovation that began in Europe in the early 1970's but has gained limited acceptance in the U.S. This card is a combination credit card, electronic banking card, and computer chip that authorizes access and expenditures for various services. The computer chip is programmed with spending limits, credit limits, and other financial information that would usually be available through an on-line electronic payments system. The number of Smart cards in circulation in the U.S. is not very great, but experiments are underway with marines at Paris Island and customers of several large banks (see American Banker, October 12, 1987).

In the future, almost all of these electronic payments services have the capability of offering greater consumer service at lower costs to institutions than paper-based services. The costs of paper-based transactions continue to rise while electronic processing benefits from economies of scale and lower costs with increased transactions volume. For the innovations to be accepted by consumers, the services must be available in a convenient form and be priced below the price of competing, traditional services.

FINANCIAL STRUCTURE

The financial and technological innovations that are evolving are likely to lead to fewer, larger, more homogeneous financial service firms that compete directly with one another. This is not to suggest that financial markets will be less competitive; a market with several hundred large financial services firms may be more competitive than a market with thousands of smaller firms. The banking competition in North Carolina with several large banks competing directly is hardly less competitive than Illinois or Colorado where there are many more institutions.

The major regional depository instititions are beginning to compete effectively with money center banks in a number of product markets (Wall Street Journal, October 1, 1987). Many of these major regional commercial banks were among the leaders in developing and introducing the electronic banking technnology in their markets. Banc One in Ohio and North Carolina National Bank are two primary examples of institutions that were early technological innovators in their markets and have become major regional institutions that compete directly with money center banks.

Several of the money center banks are active in acquiring weak institutions outside their home region, and others are establishing limited investment banking services that are very competitive with the established investment banking firms. With continuing deregulation and expansion of financial services based on financial and technological innovation, the competitive structure of financial services in the U.S. will be maintained. There is no compelling argument that financial innovations, changing asset risk structures, the modification of the Glass-Steagall Act, or technolgical innovation for financial services will lead to a less competitive financial environment in the U.S.

CONCLUSIONS

The economic and regulatory climate is generally stimulating financial and technological innovations in the financial services industry. In most instances lack of regulation or deregulation have encouraged innovation. This has surely been the case for electronic banking where the Congress decided not to enact most of the restrictions that were recommended by the National Commission on Electronic Funds Transfers. DIDMCA and the Garn-St. Germain Act have enabled and encouraged new financial instruments to be brought to the market place. Securitization of assets and Dutch Auction Preferred Stocks are two recent financial innovations that have not been deterred by regulation and that have strengthened the depository institutions and payments system in the U.S.

There is now vigorous competition among large depository institutions and investment banking firms. One of the remaining needs is modify the Glass-Steagall Act to eliminate the advantages the courts have recently given to state nonmember banks and to allow depository institutions and investment banks to compete in the areas where they can do so effectively. Now is the ideal time to review the Glass-Steagall Act to see which among its provisions can be employed to promote competition, efficiency, and technological and financial innovation for the U.S. payments system.

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So we have followed those directions.

Senator RIEGLE. I would like to go a step further on it in terms of how that works because it sort of relates to this whole question of how do you conceptualize a kind of cross-connecting or a commingling here, and where should there be boundary lines and where can boundary lines disappear.

So your insurance operators then, the insurance company that is in your location, your banking location, keeps their own, a totally separate, name?

Mr. FISHER. Yes. Nationwide Insurance Co., which is based in my hometown, has an arrangement with us. We insure them as Nationwide Insurance Co. on our stand alone stand at the sidewalk as well as the department signs inside.

Senator RIEGLE. So I can visualize it, if you built a new kind of bank structure to accommodate this, what would it look like if I walked in the door?

THE LOOK OF BANKS OF THE FUTURE

Mr. FISHER. I am building a new financial marketplace and expect to be open at the end of this year, and I will invite you to walk in the front door with me. You would be able to see a financial supermarket, displaying 12 broad services not typically found in a neighborhood branch, each of which will be called out by a blue neon sign in our case as well as full-color picture display indicating the kind of services that are available there, for instance, at the travel agent it would be a picture of a Hawaiian beach and the same type of promotional materials are available to single out each of those units that are for sale there.

Senator RIEGLE. I really want to try to visualize this and then I want to go to the practical side of it—you walk in, and everything is in view at the same time. In other words, you see the traditional banking operation, which would be called Banc One, you see the travel operation, do you see them all at once? Are you going to be designed in such a way that the person stands there and sees all of these different things simultaneously? What is the setup like?

Mr. FISHER. That is precisely the plan. The lobby area, which will include all the sales boutique sections, about the size of this hearing room, and were you to walk in that front door, the merchandising is displayed in such a way that you could see exactly what is for sale where.

Senator RIEGLE. Separate employees?

Mr. FISHER. Yes, indeed.

Senator RIEGLE. Nobody moves back and forth.

Mr. FISHER. Of course.

Senator RIEGLE. Separate companies.

Mr. FISHER. Yes.

Senator RIEGLE. With the exception of the fact that you are in the travel business, you are allowed to do that because that is your business.

Mr. FISHER. And the broker business and the trust business and the mortgage business.

Senator RIEGLE. So run me through the 12 that are going to be there, if you can. Can you do that from memory?

Mr. FISHER. The real estate, the insurance, the broker investment service, the mortgage service, trust service, financial counseling service, which we are going to break into two separate services. We have broad financial planning, and then because of the marketplace where this new branch will be located, we have also retirement planning. It's an older upscale market. And the broad lending services that you would typically find in a bank, and we have those subdivided from the consumer and the commercial side as well.

So that there are 12 selling booths, if you would, in the perimeter of this building.

Senator RIEGLE. This is really a novel step and I assume you are really out front of other banks in doing this. This is the first time I have heard of someone doing it in this form, so I gather you are right out at the front edge of this kind of an innovation.

Mr. FISHER. We believe so.

Senator RIEGLE. I would think that the average person walking in would assume there was an affiliation. Would you disagree with that?

Mr. FISHER. I would disagree with that, simply because of the sensitivity to the State restrictions under which we operate today and the experiences which we have gained over the last 3 years, we clearly recognize the preclusions, so we are today separating clearly and distinctly those lease space providers.

Senator RIEGLE. And you think the consumer, when they walk in, by just seeing the different names will just assume that these are all distinct entities rather than somehow entities that are connected to one another?

Mr. FISHER. I think Bank One Corp. will receive benefits from having delivered this unique capability. But I think it will be clear that it is separately supplied.

Senator RIEGLE. How will that be? I guess it's a little hard for me to see that. I would think that when somebody walks in and they see everything sort of under your roof—I assume you are going to have one sign outside, one overriding sign which says "Banc One," you are not going to have 12 signs, are you? Or are you?

Mr. FISHER. There is a single financial marketplace sign in which Banc One's name is secondary. And then on a secondary sign located 25 feet away there is a callout of each of the services that is for sale in this financial marketplace, and it will distinctly say "Nationwide Insurance Co.," "HER Realtors," "Bank One Travel."

Senator RIEGLE. I see.

Mr. FISHER. So the callouts are apparent from the outside as well as in the lobby.

Senator RIEGLE. You know, I find this fascinating, and I think in a sense it illustrates in an important way a lot of what we are grappling with here. So I want to take it a little bit further.

So the sign in front, the major sign, will say what?

Mr. FISHER. Financial Marketplace.

Senator RIEGLE. Financial Marketplace. And then beneath that it will say Banc One.

Mr. FISHER. Correct.

Senator RIEGLE. And then on an adjacent sign it will list the 12 boutique-type operations that are offered there.

Mr. FISHER. Correct.

Senator RIEGLE. With their own brand names.

Mr. FISHER. Yes.

Senator RIEGLE. Now, do you have more than one of these now?

Mr. FISHER. I have two experimental facilities that date back 3 years, and the one you and I have been discussing is under construction at this moment. We expect to have it open at Christmas.

Senator RIEGLE. And where are they located?

Mr. FISHER. They're located in Columbus.

Senator RIEGLE. Both in Columbus?

Mr. FISHER. Yes. We have some of America's leading companies.

Senator RIEGLE. I was going to say it looks like there is a lot of innovation going on there.

My time is up. I want to pursue a little bit later sort of technical questions that come off this concept. But my time has expired.

The CHAIRMAN. Senator Sasser.

Senator SASSER. Thank you, Mr. Chairman.

Mr. Bryan, in your testimony, on page 27, you say that credit securitization may represent one of the main ways that communities and local banks can maintain their customer franchise and survive the tidal wave of change that is now transforming our financial system.

Now, I am very much interested in what is happening to community banks and what is happening to local banks, and I find this to be an intriguing statement. I am concerned that this, what you characterize as "the tidal wave of change" is simply going to leave community banks behind.

In fact, I think it could very well bring about an increased domestic concentration in the banking industry that is going to squeeze out community banks. And we have heard some high in this administration say that we ought to move in the direction of having just ten very large banks in the country and that's it, if we want to be competitive.

Well, now, if securitization can help small banks acquire some capital and better compete, frankly I want to hear more about it.

To what extent are smaller banks securitizing their assets now? How do they do it? Do they pool their loans with other small banks? Can you just give us some idea of what they are doing under existing law now?

COMMUNITY BANKS

Mr. BRYAN. The technology, of course, is very immature, and the actual volumes are still very small. I think the best example is mortgage banking, where many small banks, in fact, are originating mortgage loans, working with mortgage conduits, and wind up with securitized loans.

Frankly, the infrastructure that needs to be in place to support smaller banks is not yet in place. One of the real important barriers to putting it in place is the regulations, which essentially make it very difficult to guarantee the first loss on securitized credit without requiring all the capital the same as if the loan remained on your balance sheet. Smaller commercial banks need to be able to provide such first loss guarantees or they won't be able

to securitize their loans loss effectively. In fact, all banks rules which are disadvantaged from those regulatory provide if you have even a partial guarantee, require you to keep the whole capital requirements, which negates many of the potential benefits of credit security action.

The reason we were thinking of securitized credit is potentially good for smaller banks is it does several things. We think, first of all, the traditional role of community banks is just threatened by the forces that are already at work, in the sense that every bank—14,000 of them—are trying to play the same role of origination and booking of loans as are 3,000 thrifts. And in a world of interstate banking and a non-bank competition, those functions are just plain threatened.

What securitization does is that it unbundles the business system and expands the roles community bank can choose.

For example, some community banks may choose to only work with their borrowers. There are many community banks that are excellent at serving their customers, and through securitization they can maintain those relationships. And yet the loans wind up being booked somewhere else. So credit securitization, unhinges the lending function from the depository function allows banks that are particularly good at lending to concentrate on that function.

On the other hand many community banks really lack the credit skills needed to operate in today's high risk world. I particular, I am talking about the very smallest banks. If you look at their portfolios, they really have very few loans on their balance sheets relative to larger banks. It's because they are excellent depositories, that should be their role, through securitization you can allow some players to only serve depositors and others to only serve borrowers and each can become more specialized, more effective institutions.

When you have everyone looking the same, and offering the same product there is little value added to the public. The more you differentiate the roles, the more you enable each institution to add value to their communities. Frankly, I think that the evidence is in mortgage banking that some very small players in terms of capital and original size have become very large mortgage banks.

An example there is a savings bank in New Hampshire, which had only a few hundred million dollars of assets to become a mortgage servicer with a multi-billion dollar serving portfolio security it built up its origination strength and did not have to book all of those loans on its own balance sheet.

Credit securitization will by no means guarantee that a community bank will survive, but I think credit securitization provides a real opportunity because it really neutralizes the capital advantage of the large players, particularly if regulations are put in place and infrastructures are put in place to support the new system.

Senator SASSER. Well, that is very interesting. Now, what about the financial condition of commercial banks? You indicate in your statement that 11 percent of the commercial banks are now in a very weak financial condition.

Mr. BRYAN. Yes.

Senator SASSER. And you also indicate that it is very difficult to characterize these banks by geographic location or the size, that they are found in every subgroup.

I thought we found most of them in the rural areas, the so-called farm banks, or I thought we found most of them around the oil patch.

What in your view has weakened these banks? Is their condition irreversible?

CONDITION OF COMMERCIAL BANKS

Mr. BRYAN. I think what has weakened these banks is that we have several thousand institutions which are not equally skilled in taking credit risk but, through the Garn-St Germain Act, have equal access to bidding for deposits. What has happened is that many of the people who do not have sufficient credit skill have the same access to deposits as better skilled players. Consequently, they have attracted but have not really been able to assess the credit risk loans they were making.

And so you wind up with a concentration occurring where the differentiating factor is not whether the bank is a farm bank or Texas bank but rather in the quality of the institution's credit underwriting skill, and it turns out in market after market that the bad credit risk gets concentrated in the bad institutions.

Now, there is definitely a geographic credit risk problem in the country, but it is magnified by the same effect. And so you have the worst in the industry charging off an unbelievable 7 or 8 percent of their loans per year. And the reason why the capital access rules that are being imposed aren't going to work is because the credit skills of different institutions are highly varied. You can shove more capital into the whole industry but it doesn't do any good if the the problem is concentrated in a fraction of the industry. And that, in fact, is the problem. The capital of the better institutions is just simply not available to absorb the losses of the weakest.

So I think that the problem, the gut problem, lies right in the deposit insurance system, and what securitization of credit enables you to do is to maintain the leader borrower relationships, but enables it to happen on a sound basis. I think that small banks, medium sized banks, and large banks will all be able to participate.

Those banks that are simply only riding off of the Government guarantees should be closed down, they should be liquidated. Banks which are poor credit underwriters should fall by the wayside and they shouldn't be kept in business. Bad credit underwriting benefits no one, including the midwestern farmer. If you've lost your farm because a bank made a bad credit judgment, you have done no one a favor. I think the only kind of credit risk that should be taken is risk that is soundly underwritten.

Senator SASSER. So what you are saying, if I understand you correctly, is deregulation or the Garn-St Germain bill over a period of time is weeding out the better bankers from the poorer bankers and the poorer bankers are falling by the wayside.

Mr. BRYAN. But they are being kept in the game because we cannot allow our banks to fail and because they, in fact, have de-

positors who have to be protected. The essential problem is that you now have introduced competition into a regulatory structure not designed for corporation. The essential challenge is how do you restructure the regulation to allow for failure without negating the public interest in a safe depository system. That is the reason why I think you really have to separate deposit insurance institutions from all other activities of financial institutions.

Senator SASSER. And you can't segregate these banks out by saying, well, these are smaller banks, these are larger banks, and these are banks in the agricultural sector of the economy?

Mr. BRYAN. No. We assumed that to be true. So when we did the analysis, we found that most farm banks are quite solvent. We found many of the midwestern banks in the upper midwest, which we assumed were in trouble, are quite sound. By the way, no matter how you slice the data, you found that the problem was concentrated, and the real differentiation, we think, is weak versus strong, not any other kind of category.

Senator SASSER. That is very interesting.

Mr. Chairman, my time is up, I see. I have got a statement which I ask unanimous consent that we include in the record.

The CHAIRMAN. Without objection, the statement will be printed at the beginning of the hearing record.

Thank you, Senator Sasser.

Mr. Walker, on page 6 of your testimony you note that the securities powers moratorium imposed on the regulators by the Competitive Equality Banking Act expires on March 1 of next year, and you imply that if Congress doesn't act to modify Glass-Steagall by then, that banks will obtain some securities powers, that there will be a real misallocation of resources.

Now the moratorium was framed so as to put pressure on Congress to act. As Senator Garn has pointed out and again, we have held hearings, we have pushed legislation through the Senate. The House hasn't acted. So we want to focus as much pressure as possible on both Senators and Congressmen so that we can get legislation that will be orderly, comprehensive, consistent, throughout the Nation.

Why do you argue that there will be a real misallocation of resources in the event that we don't pass legislation?

Mr. WALKER. Well, I think there will be a misallocation because State member banks in particular—although there may be some nationals also—but State member banks would be very, very tempted to drop out of the Federal Reserve System. As the legislation that this committee has sponsored over the years has changed the regulatory system, there really is very, very little advantage to being a member of the Federal Reserve now.

The CHAIRMAN. Why would that result in misallocation of resources if they drop out of the Federal Reserve?

Mr. WALKER. Well, I think it's a misallocation any time you have an institution or a private firm change their structure or change their regulatory status, change who would be the examiners coming into the banks, et cetera, just in order to avoid a regulation.

So I see the possibility that national and State member banks may make changes in their operations so that they convert to State nonmember banks and spend a fair amount of money in doing so.

The Federal Reserve would probably have to do some changing in terms of their examination schedules. The comptroller may run into the same kinds of things.

So I think that you can really create a situation that you don't want.

When I read about the moratorium, I remembered about the economic concept of how ceilings become floors: When you set a ceiling for something, all of a sudden everybody creeps up to the ceiling and that becomes the established price or interest rate or whatever.

It seemed to me that what you were doing in the committee was establishing March 1 as the almost eventual deadline for your new legislation. I am delighted to see it.

The CHAIRMAN. Thank you very much. That's exactly what we did have in mind, and we hope it works. We need something to blast legislation out of the Congress.

Mr. Fisher, Professor Richard Levich testified yesterday before this committee. He noted that one drawback of the trend toward securitization is: "The burden of credit evaluation is being passed on to a larger pool of participants." He argued that that is a drawback.

Do you agree that the trend toward securitization of assets will lessen the rigor of the credit analysis function by the initial lender? My Bryan has answered this earlier, but I would like to get your view. And if so, should that concern us?

Mr. FISHER. I listened very carefully to Mr. Bryan's comment and agree with it. It's more than one set of eyes looking over the shoulder.

The CHAIRMAN. Is there a tendency under those circumstances for the second set of eyes to say, "Well, they've looked at it already," and the first set of eyes to say, "Well, somebody else is going to catch it"?

Mr. FISHER. In our official dealings with the Salomon Brothers, you certainly can't believe, "Well, they just be okay out there in Columbus; we'll buy whatever they said," because I just don't believe that in the securitization world where you're dealing with some very large investors and some very big numbers, that that second set of eyes will be just as tightly focused as the first set.

The CHAIRMAN. It has been your experience that that has been the case?

Mr. FISHER. That has been the case.

The CHAIRMAN. Professor Phillips, do you believe that repealing Glass-Steagall would increase competition in our securities market and thereby reduce the cost of capital? Some of the other witnesses have said that in their statements.

Mr. PHILLIPS. Well, I think that it would increase competition in the securities market, the original issue. I think that it provides an opportunity also for innovations in new instruments to be underwritten that come from a group other than the investment banks.

The CHAIRMAN. Do you think it would reduce the cost of capital?

Mr. PHILLIPS. Whether it would substantially reduce the cost of capital to people whose securities are being underwritten, I don't know.

The CHAIRMAN. Why not? At most, I have heard estimates that if you did this and had the kind of competition that banks could provide, that a home buyer with a $100,000 mortgage would save $1000. I don't know why it's that precise, but that was the estimate made.

Mr. PHILLIPS. Well, it has to move in that direction. The extent to which it reduces borrowers 'costs, I just am unable to judge. Increased use of securitization will, I am sure, reduce some borrowers' costs, but the amount of this reduction that might flow from eliminating the Glass-Steagall resolutions is unclear.

The CHAIRMAN. Mr. Bryan?

Mr. BRYAN. The net interest margin of intermediating through the banking system is roughly 4.5 percent. Roughly 1.5 percent of that spread represents the costs of the capital of the intermediary plus the FDIC insurance costs and reserve costs. Most of those costs, for high-quality credits, can be eliminated.

We also believe that through the more efficient structuring of roles, you may well save very substantial operating expenses, non interest expenses, which are now running roughly at roughly a rate of $90 billion a year. Most of these costs will eventually flow through to the borrowers of banks, which are essentially people who have not access to the securities market, that is, individuals, small borrowers and small corporations.

I would guess that, over time, you ought to be able to eliminate the 1.0, to 1.5 percent, to 2.0 percent from the costs of back intermediation through credit securitization..

Also, very importantly, you provide new kinds of credit that are not available to many small borrowers because depository institutions should not be taking interest rate risks, given their financial structure.

Through securitization that risk can be placed with pension funds and insurance companies who have the capital structure to absorb interest rate risk, and therefore you ought to be able to provide fixed-rate mortgages to small businesses and midsize companies which—in fact, I talked yesterday with a new mortgage conduit who is in operation to establish that product and which plans to make fixed-rate loans to commercial concerns in amounts ranging from the $2 million to $3 million size range or below, down to $100,000.

The CHAIRMAN. Mr. Fisher, you've explained to us the impact of new technologies on the structure and regulation of banks. You conclude on page 6, and I quote, "The time is here to modernize the American banking system by modifying Glass-Steagall."

I would like for you to give us as much help as you can on what you mean by "modifying Glass-Steagall." Do you envision giving banks these powers as underwriting commercial paper and revenue bonds and mortgage-backed securities, selling mutual funds, or do you think we should go further and permit the underwriting of equity and long-term debt and so forth?

PHASING IN

Mr. FISHER. I don't believe at this time, Senator Proxmire, that our organization is urging you to go beyond your first cut of service relaxation. I believe that that is required in the marketplace today, and that has become quite apparent.

The CHAIRMAN. Why is that? Why is that? That's very interesting. It is critical because the bill I introduced last January would have done exactly what I say, it wouldn't have gone to equity or debt. The bill we are working on now would permit the banks to underwrite equity and debt. That is a crucial decision the committee will have to make.

Mr. FISHER. I am not sure, Senator, whether I am the one to propose a strategy for you. I believe our suggestions are, however, that we would like, first, the relaxation of those that you mention, and then we would like to become proficient and expert in that area, and we will be back for second help.

The CHAIRMAN. Mr. Phillips, how do you feel about that?

Mr. PHILLIPS. I agree. I think of it as a phasing-in. There are traditional bank assets that now require some kind of an underwriting function, and those are the ones that are involved in securitization, plus the revenue bond issue that has been before Congress forever. I think that is the place to start and then gradually expand the permissible functions as the circumstances warrant.

I also think it does a little bit toward improving the acceptability of the package. But I am not sure that that is true.

The CHAIRMAN. May I ask other members of the panel, other witnesses if anybody disagrees with that?

Mr. WALKER. I like the idea of phasing in because I think it may work just like the phasing out of regulation Q, where gradually the schedule called for the phaseout and by the time the phaseout really was completed, the market had taken care of the problem. I think we may find something similar happen here.

The CHAIRMAN. Some people would argue that it wasn't a graceful way. Regulation Q's consequences weren't all exactly what we'd like, but I think you make a good point.

Mr. Bryan?

Mr. BRYAN. I think some liberalization is really very important, very quickly, the ones mentioned plus mutual funds sponsorship.

Beyond that I think Glass-Steagall really has already outlived its usefulness and should be eliminated, remembering that when you do that, when you to that, that the biggest long-term implication will be that some of today's securities firms will wind up owning banks and some of today's banks will be able to own securities firms and that much of this cross-ownership will take place through merger and acquisition. Therefore, the timing of when Glass-Steagall is fully removed is a very important issue because once you make securities activities permitted part of the Bank Holding Act, bank holding companies could acquire securities firms and vice-virsa.

The CHAIRMAN. That is a very good point that we haven't stressed at all. It's a two-way street. It works both ways. You get competition on both sides.

Mr. BRYAN. My guess is that there needs to be at least a little lead time, let's say a couple of years, before you completely take down the law so people can really think of an environment of acquisition and consolidation. But I don't think it's much more than that. I think the sooner the laws are changed the better—and broadly, not just narrowly.

The CHAIRMAN. Thank you.

Senator Riegle.

Senator RIEGLE. Mr. Bryan, I had a fellow come in the other day who was appointed by President Reagan to serve on a study group overlooking and overseeing the problems in the savings-and-loan industry. He is a fellow from Wall Street, a very smart guy, and not connected to the savings-and-loan industry but he spent the last 6 months really trying to get into the anatomy of the problem.

He said, "I've gone through this work and I have really spent time at it and so forth and so on." He said, "As nearly as I can tell, the savings-and-loan industry is under water in terms of the Federal Government exposure to the tune of about $45 to $50 billion today. And if you cut away the ones that are really failed and can't recover, that that is the cost."

He said, "And that's the good news. The bad news is that if you wait a year and a half, the figure will be about $150 billion," as nearly as he was able to calculate it.

I don't know whether those numbers are right or not. There are a lot of people around today who are experts that think that numbers in those ranges are quite plausible.

It raises the question in my mind—that is a separate set of issues, but nevertheless, these have been financial institutions that have gone out and they obviously haven't tried to lose money but a lot of them have managed to do so.

I don't know whether you would find the same profile there, that it's up and down the size scale and across the geography rather than just concentrated on specific sectoral problems. I gather you are going to say so.

Mr. BRYAN. The best of the thrifts are equivalent to the weakest, third of the commercial banking industry, but there is a distribution effect. The really insolvent thrifts, whose net worth is compounding at a negative 5 percent a year from a cash flow problem have credit problems almost beyond comprehension. When you have 60 percent of your loans in nonaccrual, there is just a whole different kind of dynamic going on.

Senator RIEGLE. It sounds to me as if that problem relates also to what you said earlier, if I heard you right in your discussion with Senator Sasser, which is that when you've got a deregulated interest rate environment, the sickest companies, if they can jack up the interest rate and go out and attract the deposits under the Federal deposit insurance guarantee, they can stay in business and presumably continue to lose. Maybe some will turn themselves around because of that situation.

I think that raises the question of how important the Federal deposit insurance is and how we view that in a new structure and how far you stretch it and do you just keep it under the banking operation if banks are going to be in new lines of business, and how do you protect the Federal Deposit guarantees—and Uncle Sam

and all of the sort of the checkwriters of last resort, the public—from getting drawn into a situation where we may be exposed to risks that are greater than what we normally associate with traditional banking?

Do you have a concern in that area, and how would you suggest that we deal with it?

CREDIT SYSTEM IS UNSOUND

Mr. BRYAN. I absolutely believe that our credit system is fundamentally unsound. I think the numbers you gave are accurate. I think there could easily be $100 billion liquidation cost if we addressed the problem right now. The problem gets worse every time the yield curve gets steeper, because if you liquidate an insolvent institution, you have to market all of their mortgages. And the value of those mortgages is substantially under water. The accounting in the thrift industry has a lot of intangible assets which in fact are not real.

I honestly think that the entire regulatory restructuring will take place when we face up to the credit reality. I think that when we have to come up with $100 billion out of the taxpayers' money, that there will be a backlash effect which will cause the real movement to risk-free depository institutions. We obviously have to have credit risk absorbed by someone in the economy. But I do not believe it has to be within depository institutions.

I think that the long term need is to really create a cylinder around depository institutions. We have to protect the payment system, obviously, and migrate all risk outside the depository institutions. I think that is where we will have to wind up going.

Senator RIEGLE. Well, if that is right, you've got to put some kind of a cylinder around the part of the banking business that is going to stand on top of the Federal deposit insurance, how do we do that?

How do we do that at the same time we pull in new kinds of businesses which are risk businesses? I mean, the securities business, depending upon how far you take it, is a business where, you know, you are certainly not guaranteed that you are going to make money. Salomon Brothers has just found that out in municipal bonds, and others have in other areas. There has been a lot of big writedowns this year, not just by banks who have lost a lot of money in different areas but also by securities companies.

Mr. BRYAN. Underwriting risk is trivial compared to credit risk, as we have found out in the second quarter of this year with the LDC provisioning.

Senator RIEGLE. Right.

Mr. BRYAN. We charged off $17 billion last year in the commercial banking industry in pure credit risks.

Senator RIEGLE. Right.

Mr. BRYAN. Banks can already get themselves in unbelievable trouble taking credit risk, and interest rate risk. The added risk of market making or underwriting are relatively small compared to the risk that they already take.

I think what we need to do is begin migrating risk through regulation outside of depository institutions into nonbank subsidiaries,

which are allowed to fail if they make bad mistakes. And I have not begun to think through fully how you migrate that risk with capital adequacy guidelines, audits and so forth. Frankly, you could, at the end of the day, bar banks from making loans that are not credit-enhanced, and not securitized. In other words, depository institutions might only be allowed to invest in short term, securities with credit ratings of AA and above. Obviously, a substantial phase-in period would be required.

This would require all risk taking activity to take place outside of depository institutions. You obviously can't go to such a structure like that tomorrow, but you have to begin movement. And I don't believe limiting the freedom of good players is the way out of the box.

I really do think that we need the skills of the better institutions, and right now many of the better institutions are effectively blocked by existing regulation. The leading regional banks, the leading money center banks, and, frankly, some of the community banks could do a lot more with expanded powers.

I think we have two problems, and that we have to address them separately and fundamentally.

Senator RIEGLE. Well, if you accept that premise—I want to come back to your point about the need for the cylinder around the banking activities that sit on top of the Federal Deposit guarantees and presumably are tied into the Federal Reserve functions as well.

How do we do that? How do you think we do that? You are an expert in banking. Do you think, if we are going to go to a new structure, aren't we going to need something new there, and what do you think it might be?

Mr. BRYAN. Well, I think that if you create the opportunity for banks to do activities outside the bank and give them regulatory and legislative encouragement to do so and basically make it prohibitive for them to take risks into the depository institution itself, perhaps by ratcheting up capital guidelines or in some other manner, you will incite them to migrate risk outside of that structure. This will also insure depositors to wind up paying the economic costs of deposit insurance in lower deposit rates and will cause people borrowing to pay the full costs of the credit risks being assumed. In other words, you will basically quit subsidizing borrowing through deposit insurance. And frankly, I think that is appropriate because the existing system just isn't working.

Senator RIEGLE. So you are very clear in your own mind that we should not in any way extend deposit insurance guarantees over into the new areas if banks get new areas?

Mr. BRYAN. Right.

Senator RIEGLE. You're very clear that it's important to avoid having that happen.

Mr. BRYAN. Yes.

Senator RIEGLE. But you're not quite sure how to do that?

Mr. BRYAN. The thinking that I am now talking about is really very new to us, and we have not thought deeply about it. But I think there are ways to encourage risk to migrate, and I think that the big thing is you've got to be able to allow everything but the deposit institution to fail.

Senator RIEGLE. You see, the question in my mind is that if that is going to happen, if it's the will of the Congress and the country legislatively to move banks into new lines of business, then you immediately have to answer the question at the same time as to what do you do with the Federal deposit guarantee. If you're not going to stretch that out under the new activities, if there are compelling reasons not to, then you've got to come up with a way of handling that problem. You are saying that you're thinking about it, but you don't have the answer to that as yet? Because I want to ask the others, too.

Mr. BRYAN. I think that all you need to do is to have the Federal Reserve say that after *x* period of time that the safety nets are not going to apply to nonbank affiliates, and get a migration of capital and activity outside of depository institutions. I think if you just do that and then you begin to have the regulators themselves basically stopping any new—risk taking within depository institutions, I believe this migration will take place fairly rapidly.

Senator RIEGLE. Yes. But how do you prevent—I mean, you know, there are people in every line of business that don't follow the rules—how do you prevent the leakage back and forth by somebody who is running a bank operation and who has now got the new business activities going and who wants to start to move capital around in such a way as to maybe shore up the new side of the business if it's not doing very well?

I mean, do we need very stiff penalties? Do you put people in prison for a long period of time if they violate that? Do you take away their charters?

Mr. BRYAN. I think all of those are reasonable ideas to look at. I think the audit process, is a labor-intensive process. I think the main thing to do is to protect the depository institution and let the rest of it be regulated by the marketplace.

Senator RIEGLE. You see, we've had a big fight around here on regulators. We haven't been able to get money for regulators.

One of the reasons we've got problems is that we have had an administration that has sort of viewed regulation as a bad thing. So we have had less regulation as problems have been building up.

It sounds to me like what we are talking about here if we are going to go down a route that is going to require more regulation and careful regulation, we are going to have to pay for it. And there is no free lunch. Banc One is going to have to pay for it and depositors are going to have to pay for it, and there is going to be a lot of regulation, and anybody that thinks we're going to get it without regulation I think is kidding themselves.

Mr. BRYAN. I like to liken this new technology, this "credit securitization technology to the automotive industry in the year 1900. We're missing a lot of the infrastructure needed to support the technology. We're missing service stations, we're missing mechanics, we're missing the whole infrastructure, roads and so forth. We are also missing all the rules. We are missing the stop signs, we're missing the cops, we're missing the jails, we're missing the drunk-driving test.

We need to put in place a structure that is appropriate to the new technology and the new environment.

Senator RIEGLE. Well, then I think—if I may just take one more minute, Mr. Chairman—I think it's very important that the proponents of the expansion of the system, when they ask for that, and I can see why they would for compelling competitive business reasons and I think those cases have been well argued and we have heard them a lot of times, have an obligation at the same time to come in with a recommendation as to how that supervisory and regulatory structure is going to work so that it's a fail-safe system. I mean, you are not peddling any private interest insofar as I know.

Mr. BRYAN. Our clients embrace all elements of the financial services industry.

Senator RIEGLE. But when someone from your more arm's-length vantage point says, "Look, we really need a monitoring administrative policing structure that really anticipates the problems and forestalls the problems," and then it seems to me that any headlong rush to a new system has to have with it that kind of structure well thought out. And I don't know, if you get those things out of phase—and there will be a temptation to do that because I think we tend to be much more inclined to sort of leap ahead whether we have built the structure or not.

Mr. BRYAN. I honestly do not think it makes any sense to hold hostage Glass-Steagall relief because I honestly do not think that we are going to have the political mood in the country to address the fundamental structurly, regulatory issues, until we clean up the thrift mess. I think when that happens, then we will be able to address it.

Right now, you've got narrow self-interest by the nonbanks versus the banks at stake, and I think that that Glass-Steagall relief will get held hostage in a way that will not be helpful in getting the fundamental restructuring of the regulatory system that is required. I think the fundamental restructuring question needs to be done in parallel, and frankly that applies as much to the nonbanks' activities as well as to the banks' activities. I think we need strong functional regulation that is designed for the new marketplace, that is designed to make the markets work effectively and efficiently through labor-intensive regulation.

Senator RIEGLE. John Heimann was in here yesterday, and I think qualifies as an expert on banking structure as well, and he argued that we were going to need to have a regulatory body that in a sense is new, that covers the bank holding company if the bank holding company is going to be in related lines of activity. Would you agree with that?

Mr. BRYAN. Well, I think the real issue that if you put a functional regulatory in charge of every function and someone on top of it, I think that it will than be an issue for Congress because you will almost have created, in fact, a fourth arm of Government, a fourth branch of Government because the head of that structure would be in a very powerful position. I see this issue of concentration of power as being a fundamental block to that kind of an approach.

But I think that we need to think through with a clean piece of paper a regulatory structure that is designed for a fundamentally different financial environment than any of us grew up with or

knew about. And I think we have only scratched the surface of thinking through that structure, and I think it is going to take us several years to put it in place. First we need to design it and then we need to put it in place. I think we're talking about a 3-to-5-year kind of an effort.

Senator RIEGLE. I am way over my time. I'm sorry, Mr. Chairman.

The CHAIRMAN. No, that's fine. I think we are right at the heart of the question.

This has been excellent testimony, gentlemen. We are very much in your debt. You have made a fine record, and we appreciate it.

The committee will stand adjourned.

[Whereupon, at 12:05 p.m., the committee was adjourned.]

[Additional material for the record follows:]

STATEMENT OF SENATOR ALFONSE M. D'AMATO

OCTOBER 14, 1987

I WANT TO WELCOME THIS MORNING'S WITNESSES BECAUSE THEY WILL SHED CONSIDERABLE LIGHT ON THE MANNER IN WHICH TECHNOLOGICAL ADVANCES HAVE RADICALLY ALTERED THE FINANCIAL SERVICES AND BANKING INDUSTRIES. THE ADVENT OF THESE NEW TECHNOLOGIES HAS CREATED A GLOBAL SECURITIES AND BANKING MARKET. IN DETERMINING THE REGULATORY STRUCTURE OF OUR DOMESTIC FINANCIAL MARKETS, WE SHOULD BE MINDFUL OF THE FACT THAT FOREIGN AND DOMESTIC MARKETS ARE INEXTRICABLY INTERTWINED AND THAT CAPITAL DOES NOT REALIZE GEOGRAPHIC BOUNDARIES. OUR TASK IS TO ENSURE THE SAFETY AND SOUNDNESS OF OUR FINANCIAL SYSTEM WHILE ENACTING COMPREHENSIVE REFORM THAT ATTRACTS, RATHER THAN REJECTS, FOREIGN CAPITAL.

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